

## U.S. economy . . . WTO & trade barrier reductions . . . EU enlargement . . . Farm labor . . . Milk market

### Slower Growth for U.S. Economy in 2001

*U.S. economic growth* slowed markedly in the second half of 2000. From a break-neck rate of 6 percent in the first half of 2000, forecast growth in Gross Domestic Product (GDP) decreased significantly in the second half of 2000, resulting in an average annual growth rate expected at 5.2 percent. In 2001, GDP growth is expected to drop further, averaging 3 percent, owing to continued tightness in labor markets, a slowing of consumer income growth, and tightening credit that will slow business investment. Despite these trends, the U.S. economy will probably not experience a recession, because of overall increases in productivity and investment, a reduced trade deficit, and continued gains in consumer income and jobs. Inflation rose moderately in 2000 to 2.3 percent and will increase slightly in 2001 to around 2.5 percent due to higher labor and energy costs.

### Surging Demand Pulls Dairy Industry in New Directions

*Growth in milk output* is expected to ease slightly in 2001, which may allow prices for milk and dairy products to recover in calendar 2001. Since late 1999, very large supplies have put prices under pressure, even as the strong economy generated the strongest demand in many decades. With the economy projected to expand in 2001, although more slowly, consumer income and spending should continue to gain. Thus, demand for dairy products—especially those used by restaurants or as ingredients in prepared foods—is expected to stay strong.

### WTO Negotiations: Potential Gains From Ag Policy Reform

*The World Trade Organization* (WTO) opened global trade negotiations on agriculture in Geneva in March 2000. The negotiations are expected to address national agricultural policies related to market access limitations (tariffs, tariff-rate quotas, and other trade barriers), domestic support to agricultural produc-



ers, and export subsidies. These policies cause world agricultural prices to be about 12 percent below the level they would otherwise be, according to recent analysis by USDA's Economic Research Service.

Nearly 80 percent of world agricultural price distortions are accounted for by developed economies. Reform commitments implemented by developed-country WTO members during 1995-2000 include: reducing tariffs by 36 percent, on average, and converting most nontariff barriers to tariffs or to tariff-rate quotas; reducing aggregate levels of domestic support by 20 percent; and placing declining ceilings on the value and volume of subsidized exports. Over the long term (about 15 years), full elimination of agricultural price distortions would lead to an increase in world welfare, or consumer purchasing power, of \$56 billion annually, with nearly one-fourth accruing to the U.S.

### EU Enlargement: Negotiations Give Rise to New Issues

*The European Union* (EU) continues active negotiations with 10 countries of Central and Eastern Europe (CEE) for membership in the EU. Negotiations that began in March 1998 with five CEE's

(Poland, Hungary, Czech Republic, Slovenia, and Estonia) expanded to five others in October 1999—Latvia, Lithuania, Slovakia, Bulgaria, and Romania. Cyprus and Malta—two non-CEE states—are also candidates for membership.

Several recent developments could dramatically alter the impact of accession on agriculture in Europe. Accession will most likely be delayed from earlier expectations and will probably include a transition period. EU negotiators have also expressed reluctance to grant CEE farmers the full range of Common Agricultural Policy support immediately on accession. In addition, depreciation of the euro since 1999 means that the gap between CEE and the generally higher EU prices has narrowed considerably, and that higher prices anticipated by CEE producers upon accession may not materialize.

### Hired Farm Labor in the U.S. & Mexico

*U.S. farmers* are holding their own in competing for workers and providing wage increases that generally keep pace with the cost of living. However, foreign-born workers—mostly from Mexico—make up an increasing share of U.S. hired farm labor. The movement of Mexican workers to U.S. farms largely reflects wage differentials between the U.S. and Mexico, as well as differences in employment prospects. Taking into account seasonal fluctuations, U.S. agriculture employed an average of 890,300 hired farmworkers in 2000, with an average wage of \$8.29 per hour compared with \$13.69 for nonfarm jobs. In contrast, Mexican agriculture employed about 2.3 million hired laborers over 12 years old in 1998, with an average 8-hour wage of about \$3.60, although the wage differential is somewhat overstated because the cost of living is lower in Mexico. Availability of hired farm labor in both countries is likely to influence production and trade of labor-intensive commodities such as greenhouse and nursery products and fruit and vegetables.

## Agricultural Economy



### Slower Growth for U.S. Economy In 2001

U.S. economic growth slowed markedly in the second half of 2000, ushering in the “soft landing” many analysts had hoped for. From a breakneck rate of 6 percent in the first half of 2000, forecast growth in Gross Domestic Product (GDP) decreased significantly in the second half of 2000, resulting in an average annual growth rate expected at 5.2 percent.

In 2001, GDP growth is expected to drop further, averaging 3 percent, owing to continued tightness in labor markets, a slowing of consumer income growth, and tightening credit that will slow business investment. Inflation, which rose moderately in 2000 to 2.3 percent according to the GDP deflator, will increase slightly in 2001 to around 2.5 percent due to higher labor and energy costs. Despite these trends, it is unlikely the U.S. economy will experience a recession; overall increases in productivity and investment, a reduced trade deficit, and continued gains in consumer income and jobs all point to economic growth in the coming year.

Consumer spending will likely increase by 3 percent in 2001, but it will be held in check by a tight labor market, more limited credit, and higher energy prices. Consumer spending grew at a slower rate in 2000 than in 1999; in particular, spending on durable goods such as cars, appliances, and furniture deteriorated throughout 2000 as a consequence of relatively heavy consumer spend-

ing in 1996-99. Major appliance manufacturers saw sharp declines in earnings, and auto manufacturers were forced to offer aggressive price rebates and credit discounts to prevent steep drops in sales.

Overall, consumer spending in the third quarter of 2000 grew at an annualized rate of 3.8 percent, which outpaced growth of 3.1 percent in consumers’ disposable income. Although the savings rate fell, it was the smallest decline in 2 years. In 2001, growth of income from labor will be about the same as in 2000 (largely due to higher wages), and a decline in income from other sources, such as stock dividends, will be offset by lower capital gains taxes paid. This will result in disposable income growing at 3 percent, the same rate as in 2000 and directly in line with consumer spending.

Despite consistent growth in wages, workers are likely to face a slowdown in employment growth in 2001 as businesses’ profit growth slackens and difficulties in finding appropriate workers persist. The trend became evident in 2000, as the low U.S. unemployment rate (4 percent) and a dearth of skilled workers led to higher labor costs for many U.S. companies. Workers’ total compensation packages, which include wages plus benefits, rose at an annualized rate of 4.6 percent for the first 9 months of 2000 as employers, hamstrung by the tight

labor market, were forced to absorb much of the rise in health insurance costs.

Rising energy prices remained a persistent concern for businesses and consumers alike in 2000. Although the markets for other raw materials remained relatively static, crude oil prices finished the year near \$30 per barrel, up sharply from \$9.39 per barrel of December 1998. The high price of oil not only drove up consumer and corporate energy bills; it also contributed to increased trade deficits. Rising natural gas prices will further contribute to rising consumer and business energy expenses.

Fortunately, the impact of oil price increases on the U.S. economy will be relatively small in 2001, thanks to a general lack of upward pressure on prices of raw materials, increased domestic competitiveness in the U.S. economy, a relative drop in the size of energy expenditures in the economy, and oil prices that, in real terms, are only \$5 per barrel above the 1985-99 average. In fact, the impact of the 2001 oil market on the economy should be smaller than that of the 1974, 1979, or even 1990 oil shocks. Growth has slowed about 0.2 percent and overall inflation is about 0.3 percent higher than it would have been compared with a year with normal real crude prices.

As consumer spending dropped off in the last half of 2000, investment spending by businesses slowed. Tighter credit standards, a slowdown in profit growth, falling equity prices, and higher commercial interest rates brought the third quarter’s business investment growth down from more than 19 percent in the first half of the year to low single digits. Solid consumer spending combined with strong profits should bring growth of 5 to 6 percent in business investment spending in 2001, and the profits from such investment are expected to remain substantial. However, the tight credit situation, higher commercial interest rates, and slowing profit growth will keep business investment spending below the recent double-digit growth rates of 1995-99.

Growth in business spending in 2001 will be partly offset by smaller additions from Government spending. Commercial interest rates will rise, reflecting an increase in the market risk premium. From early 2000 to the third quarter, the risk premium on junk bonds compared with Treasury bonds rose to 8 percentage points. A recent Federal Reserve survey of lending officers showed

that businesses must now meet higher credit standards when they apply for loans. These new, more stringent requirements in the private market, coupled with the tight labor market, will slow capital and employment expansion.

As a result of slowing economic growth, moderate inflation, and expected easing of short-term interest rates by the Federal Reserve, yields of Treasury and AAA bonds will drop in 2001. However, the general tightness in credit markets seen in the last half of 2000 should persist in 2001, resulting in higher interest rates for junk bonds and commercial loans.

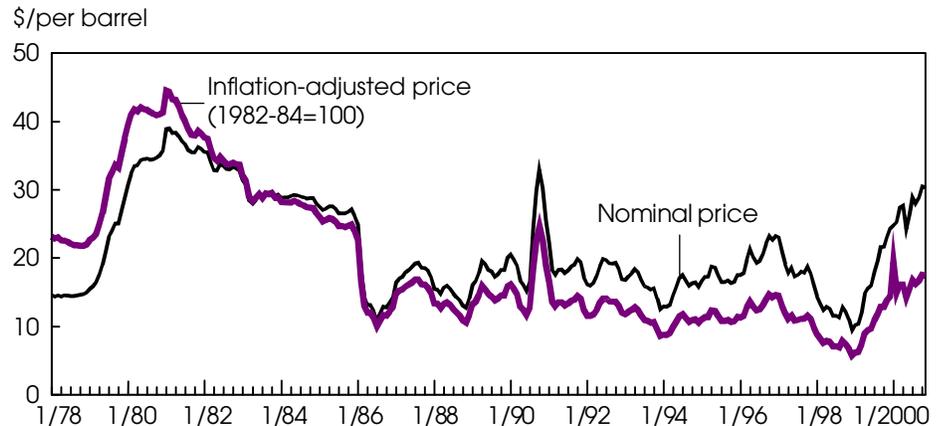
### The View from Abroad

The U.S.'s powerful economic growth was reflected overseas throughout 2000. Overall, world average GDP increased by 4 percent in 2000, enhanced by a spectacular growth spurt of 7 percent in Asia. In North America, Mexico's GDP growth registered more than 6 percent; Canada's GDP came in at just under 5 percent. Profiting from rising crude oil prices, the economies of the Middle East grew nearly 5 percent. The economies of South America grew a solid 3.4 percent, despite problems in Argentina, Venezuela, and Peru.

Despite this robust global performance, growth rates of most developed nations (with the exceptions of Japan and Germany) should decline by 0.5 to 1 percent in 2001. The economies of many Asian nations will slow as well because growth rates seen in 2000, which reflect a sharp turnaround from the 1998 financial crisis, are unsustainable. High crude oil prices in early 2001 will be a major factor stunting growth not only in the developed countries and Asia, but in some of the more vulnerable developing nations as well. Higher world interest rates, a smaller U.S. trade deficit, and a weaker dollar will have a marginally negative impact on world growth.

World demand for agricultural exports played a key role in offsetting the strengthening of the dollar in 2000; even though they became more expensive in relative terms, U.S. agricultural exports saw a modest increase. The demand for dollars stemmed from uncertainty associated with the recovering economies in Asia and Latin America and a lack of confidence in Asian and developing economy stock markets, as well as foreign investors' view of the U.S. as a safe haven. However, the U.S. trade deficit (more

### Real Oil Prices Are Edging Up



Refiners' acquisition cost of crude.  
Source: U.S. Department of Energy.  
Economic Research Service, USDA

than \$400 billion in 1996 dollars), a weak U.S. stock market, and improving financial conditions in other developed countries and Asia will all serve to weaken demand for dollars in 2001. The resulting decrease of funds flowing into the U.S. will boost long-term private interest rates, even as short-term U.S. Treasury bonds stabilize and long-term U.S. Treasury bill yields fall slightly. A weaker dollar and ongoing, if slower, world growth will lead to a slight improvement in the U.S. trade deficit in early 2001. The deficit should decrease further in the second half of 2001, when slower world growth is likely to result in lower oil prices.

### Challenges for U.S. Agriculture In 2001

Slower domestic and world growth in 2001, coupled with the lingering impact of a strong dollar, mean a more expensive and potentially more problematic business environment for U.S. farmers in 2001. Agricultural exports in particular will be affected, much as they were in 2000. Although the value of the dollar rose less than 2 percent in 2000, its value relative to the currencies of other countries that export farm products rose even more. As a result, prices of U.S. farm exports rose considerably compared with those of foreign competitors.

Even though the dollar is expected to weaken somewhat in 2001, agricultural exports will grow at a slower rate than exports of manufactured products. If the domestic economy were to experience a recession in 2001, world growth would decrease sharply

and U.S. farm exports would decline. On the domestic front—again, barring a recession—growth in after-tax personal income will ensure that U.S. consumers keep buying domestic agricultural products at a healthy rate.

Although higher energy prices will not have a dramatic effect on the overall U.S. economy, they have triggered increases in farm expenses. While fuel prices will not likely rise as dramatically in 2001 as they did in 2000, fuel expenses for many farmers will be up from 2000. Peak farm diesel use is in the spring when prices will be up from a year earlier. Electricity and natural gas prices should rise as well, and increasing natural gas prices will in turn raise the cost of nitrogen-based fertilizer. The fertilizer price index should be up in 2001 more than it was in 2000. The tight labor market is expected to push the cost of farm labor higher in 2001 than in 2000.

Projections for farm credit in 2001 are mixed. A tighter credit market will make it harder for less financially sound farmers to get commercial credit, and interest rates for average borrowers who do qualify for short-term loans will be higher than in past years. Good customers with sound balance sheets may pay slightly less for credit. Average long-term real estate loans may be cheaper depending on institutional lending practices, as yields on Treasury bonds fall compared with 2000. **AO**

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## Agricultural Economy

# Exchange Rate Indexes & U.S. Ag Trade

The value of the dollar has increased sharply in the last several years. Between April 1995 and September 2000, the U.S. real agricultural trade-weighted exchange rate (based on bilateral exchange rates weighted by share of exports) appreciated by 25 percent, reversing about 10 years of a declining dollar value. In addition, the U.S. dollar has appreciated even more against currencies of trade competitors, making U.S. producers less competitive in world markets. Between April 1995 and September 2000, the U.S. dollar appreciated 42 percent relative to currencies of U.S. competitors.

The exchange rate—the price of a currency in terms of another currency—is arguably the single most important variable in determining the economic environment for trade sectors. Exchange rates affect trade by determining the relationship between international and domestic prices. Changes in the real (inflation-adjusted) exchange rate result in the raising or lowering of prices of U.S. goods in local currency terms around the world. An appreciating dollar raises the price of U.S. goods on the international market, while a depreciating dollar lowers these prices. Exchange rate movements are particularly important for agriculture sectors in countries like the U.S., where exports account for a major portion of agricultural production.

Historically, movements in exchange rates have accounted for approximately 25 percent of the change in U.S. agricultural export value. Other factors, such as the income growth rate in developing countries, the growth and productivity of foreign agriculture sectors that compete with the U.S., and weather conditions accounted for much of the rest. But in the last 5 years, the appreciation of U.S. dollar has become a handicap for U.S. agricultural exports.

Continuing appreciation has allowed competitors to gain market share and in turn expand their production. Losses in U.S. market share may have been even greater if low world prices had not deterred growth in foreign production.

A major event contributing to appreciation of the dollar was the 1997-99 international financial crisis. As countries in Asia and elsewhere experienced the crisis, their economies contracted sharply while the U.S. economy continued to expand rapidly. The differential between the robust growth of the U.S. economy and slow or negative growth in other countries led to large inflows of capital into the U.S., generating demand for dollars that simultaneously appreciated the dollar and depreciated local currencies around the world.

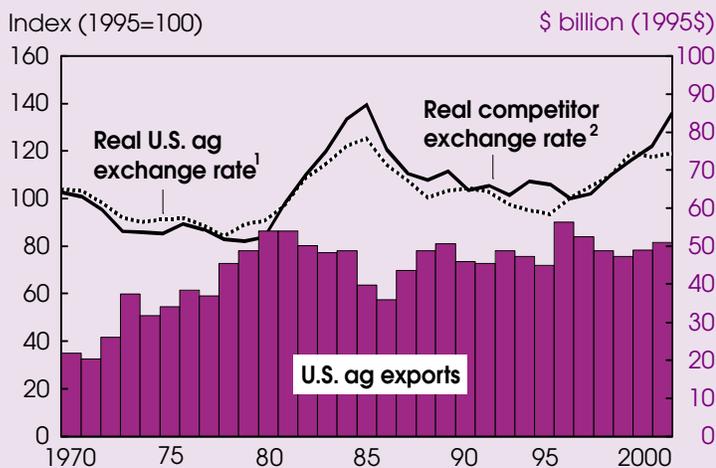
This recent period of appreciation has been a major contributor to lower U.S. agricultural exports in recent years. From a peak of nearly \$60 billion in fiscal 1995, U.S. agricultural exports declined to \$49 billion in 1999. World demand is improving, though, and U.S. exports are forecast at \$53 billion in 2001, up from \$51 billion in 2000.

Appreciation of the dollar was a major factor in the 2-percent decline in global share of all U.S. agricultural exports between 1992 and 1998. The export performance of specific U.S. goods, however, varied depending on the relative exchange rate movements of competitors and importers and on specific foreign market conditions. U.S. wheat's market share, for example, lost 10.5 percentage points between 1992 and 1998. The global market share of U.S. corn declined by about 3 percentage points over the same period. In contrast, the global market share of fresh and frozen U.S. poultry exports increased over 8 percentage points between 1992 and 1998. The export market share of U.S. cotton increased 1.6 percentage points during this period.

Exchange rates can be used to assess shifts in the competitiveness of U.S. agricultural products as the value of the dollar changes relative to other currencies. Bilateral rates measure the value of the dollar against another currency. These are helpful in understanding what affects exports to particular markets. The "value" of the dollar becomes more complex when considering overall U.S. agricultural exports or even a single commodity—each commodity is generally exported to several countries. The analyst needs a measure of value that accounts for the dollar's performance against currencies of the countries that are important in trade of a specific commodity. In economics, such a measure is referred to as an effective exchange rate index, which takes weighted averages of several bilateral exchange rates and combines them into a single index. (*Agricultural Outlook's* Table 26 presents indexes of trade-weighted exchange rates. The database is available at: <http://usda.mannlib.cornell.edu/data-sets/international/88021/>)

*Market and competitor* weighting schemes are the two most frequently used when calculating indexes for trade analysis. For market indexes, the weights are shares of U.S. exports for a particular commodity. For competitor indexes, weights are country shares of world exports (excluding U.S. exports) for a particular commodity. Both

### U.S. Ag Exports Remain Below Mid-1990's Peak As Dollar Strengthens



Total U.S. exports, 2000 preliminary.

1. Index of bilateral U.S.-dollar exchange rates (U.S.-export market countries), adjusted for inflation and weighted by country shares of U.S. exports.

2. Index of bilateral U.S.-dollar exchange rates (U.S.-competitor countries), adjusted for inflation and weighted by countries' export shares of world exports (excluding U.S.).

market and competitor indexes are constructed so that an upward movement indicates a rise in the dollar's value and a subsequent loss of price competitiveness for U.S. exports.

For example, the U.S. cotton *market index* reflects the overall level of the dollar relative to currencies of U.S. cotton importers. The U.S. cotton *competitor index* reflects the overall level of the dollar relative to currencies of U.S. competitors in the world cotton market. Between 1970 and 2000, foreign cotton exporting countries

### Exchange Rate Terms

**Currency appreciation (depreciation).** Occurs when one currency declines (increases) relative to another. Appreciation implies that one currency become more valuable relative to another and hence less is required in exchange for the other currency. Thus, depreciation of the euro over the past year means more euros are needed to buy dollars.

**Devaluation.** Occurs when a government decides to reduce the value of its currency relative to others.

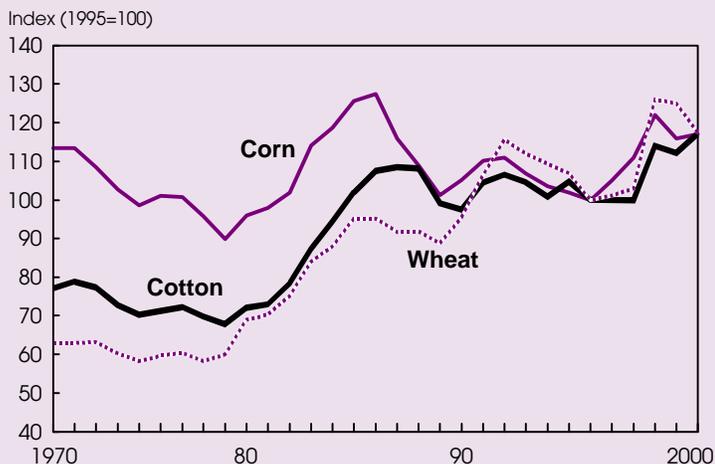
**Effective exchange rate.** Another term for the total trade-weighted exchange rate.

**Exchange rate.** Rate at which one currency trades for another.

**Real exchange rate.** The nominal exchange rate adjusted by relative rates of inflation as measured by consumer prices indexes. Thus, the real China yuan is equal to the nominal yuan worth approximately \$0.12 (November 17, 2000), times the ratio of the USCPI and China CPI measured at some common base year such as 1995. This yields a real 1995 yuan of \$0.125.

**Trade-weighted exchange rate.** A weighted-average index of bilateral exchange rates between trade partners using trade volumes as weights. Usually shares of either exports or imports are used as weights, but sometimes exports and imports combined can be used as weights.

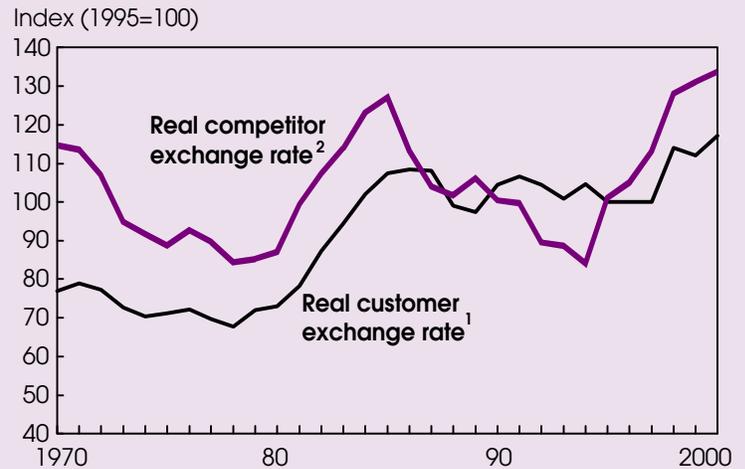
### Value of Dollar Against Currencies of U.S. Export Markets Varies by Commodity



Index of bilateral rates (between U.S. dollar and currencies of U.S. markets), adjusted for inflation and weighted by countries' share of U.S. exports. 2000 preliminary.

Economic Research Service, USDA

### Value of Dollar Has Risen for U.S. Cotton Exporters



2000 preliminary.

1. Index of bilateral U.S. -dollar exchange rate (U.S. -export market countries), adjusted for inflation and weighted by country shares of U.S. cotton exports.
2. Index of bilateral U.S. -dollar exchange rates (U.S. -competitor countries), adjusted for inflation and weighted by countries' export shares of world cotton exports (excluding U.S.).

Economic Research Service, USDA

maintained their competitiveness with low-valued currencies relative to the U.S. dollar, except in 1987-94.

Weights for individual indexes depend on performance in countries that are important for trade in that commodity. For cotton, China accounts for the largest share of U.S. exports at 25 percent (north-east Asia accounts for 54 percent). Nearly 60 percent of U.S. corn exports go to northeast Asia, with Japan accounting for 30 percent. Exports of U.S. soybeans are shipped mostly to Europe (40 percent) and northeast Asia (37 percent). U.S. rice exports are less concentrated: to Europe (26 percent), Latin America (18 percent), Mexico (9 percent), Canada (8 percent), and to North Africa/Middle East (13 percent). Because of the size of their market shares, bilateral exchange rates of these nations and regions are the most significant components of the respective commodity trade-weighted exchange rate indexes.

Variations in these market shares lead to different trends in trade-weighted exchange rates across commodities and commodity groupings. For instance, long-term exchange-rate patterns for wheat, corn, and cotton have been quite different due to differences in destination countries—major wheat markets are Asia and North Africa, major corn markets are Asia and Mexico, and major cotton markets are Asia and Latin America. Long-term appreciation in the wheat exchange rate may be one factor in the long-term stagnation of U.S. wheat exports. Also, trade-weighted exchange rates for bulk commodities and processed intermediate products have more closely tracked overall U.S. agricultural exchange rates than have those for horticulture and processed products and high-value processed products. **AO**

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## Briefs

**Ag Economy****U.S. Ag Markets Show Signs of Improvement**

U.S. agricultural markets continue to show some improvement from the large supply/weak demand conditions of the late 1990's. Although markets for major field crops continue to have plentiful supplies, export demand is improving slowly and market prices appear to be picking up. Markets for livestock are generally stronger than for field crops, as 2000 witnessed gains in average prices for cattle and hogs.

Despite continued weak market prices for field crops in 2000, net farm income for the year has been forecast in the mid-\$40 billion range, up from \$43.4 billion in 1999. Producer income was bolstered in 2000 by direct payments to producers of major field crops under the 1996 Farm Act (e.g., production flexibility contract, loan deficiency, and Conservation Reserve Program payments) and a third infusion of emergency government assistance. Record government payments in 2000 helped keep farm income near the 1990-99 average. Even with the addition of recently enacted emergency assistance (fiscal 2001 appropriations), government payments to the sector will decline in 2001, likely resulting in lower farm income.

As in recent years, government loan deficiency payments (LDP's), which provide government support payments to major field crop producers when farm prices drop below local loan rates, will continue to supplement returns from the marketplace.

Fuel expenses for the U.S. farm sector in 2000 were over \$8 billion, about 40 percent above 1999. Total production expenses were up 5 percent to \$178 billion. Costs for fuel and other energy-related inputs will continue to concern producers in 2001.

Agricultural exports are forecast at \$53 billion in fiscal 2001, up from \$51 billion in 2000. Tonnage is forecast up for bulk commodities, but large global supplies of many commodities continue to limit price gains. Cotton is the exception. A major drag on U.S. exports has been the rising value of the dollar, which has boosted the price of U.S. farm exports in foreign markets (see "Agricultural Economy: Exchange Rate Indexes and U.S. Agricultural Trade," p. 4).

A main reason for continued low domestic prices for major field crops is favor-

able weather in major U.S. producing areas and many foreign countries. The markets reflect record corn and soybean crops harvested in 2000. Domestic use of most crops is anticipated to remain strong in 2000/01, and exports should improve somewhat. Nevertheless, ending stocks will expand for soybeans and corn, keeping downward pressure on prices for the fourth consecutive year.

A key exception to favorable weather in 2000 was in the southern and central Great Plains, where hot and dry weather last summer and fall produced severe drought conditions. Many crop producers in this region (particularly cotton) lost a substantial portion of their production and income. Cattle producers in the region encountered animal losses due to the heat and lack of water and experienced rising costs for feed as local feed supplies dried up.

Red meat and poultry production is forecast to reach a record high in 2000, and output is projected to edge even higher in 2001. Feed costs remain relatively low, keeping production expenses in check for many livestock producers.

Despite record total meat supplies, the robust U.S. economy continues to fuel demand and sustain farm prices. Hog prices are expected to average in the lower \$40's per cwt in 2001, after a \$10 rebound in 2000 (\$44 average). Likewise, cattle prices, despite large supplies of competing meats at relatively low prices, have rebounded from the lows reached in the mid-1990's. Modest gains in broiler production in 2000 and 2001 will lead to slightly lower prices—forecast in the mid-\$0.50's per pound for both years, down from \$0.58 in 1999. **AO**

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**Net Farm Income in 2000 Is Near 1990's Average**

	1990-99	1996	1997	1998	1999	2000
	\$ billion					
Crop receipts	94.2	106.3	111.1	102.5	93.1	94.1
Livestock receipts	90.5	92.8	96.5	94.1	95.5	100.3
Government payments	10.3	7.3	7.5	12.2	20.6	23.3
Net farm income	45.2	54.9	48.6	44.6	43.4	45.6
U.S. ag exports <sup>1</sup>	48.2	59.9	57.4	53.7	49.2	50.9
	Million metric tons					
World stocks <sup>2</sup>	351.0	318.8	369.2	397.1	386.1	341.1
	\$ per bu.					
Wheat price <sup>3</sup>	3.29	4.30	3.38	2.65	2.48	2.50-2.70
Corn price <sup>3</sup>	2.36	2.71	2.43	1.94	1.82	1.65-2.05
Soybean price <sup>3</sup>	5.89	7.35	6.47	4.93	4.63	4.50-5.10

2000 forecast made in September 2000.

1. Fiscal year ending September 30. 2. Ending stocks of major grains and oilseeds for season beginning in year indicated. 3. U.S. season-average farm price for marketing years beginning in years indicated.

See the ERS website for the latest farm income forecasts.  
[www.ers.usda.gov](http://www.ers.usda.gov)

## Livestock, Dairy, & Poultry

# Surging Demand Pulls Dairy Industry In New Directions

Dairy markets during 1998-2000 faced one major question: Will milk production expand enough to meet the extraordinary growth in demand for dairy products? In 1998 and most of 1999, production did not keep pace, and prices soared. Since late 1999, however, the situation has reversed. Prices fell in response to pressure from very large supplies, even as the strong economy generated the strongest demand in many decades.

Growth in milk output is expected to ease slightly in 2001. This drop in growth may allow prices for milk and dairy products to recover in calendar 2001, at least somewhat. With the economy projected to expand in 2001, consumer incomes and spending should continue to gain. Demand for dairy products, therefore, is expected to stay strong, although actual growth may ease a bit. Demand for dairy products used by restaurants or as ingredients in prepared foods will probably be particularly brisk.

Markets for dairy products have changed substantially in recent years. Retail sales no longer are the main outlet for most dairy products and, during the last few years, have lagged behind other outlets. Although most fluid milk is still sold at retail, cheese and butter are used mostly by away-from-home dining establishments or by makers of processed food. Large shares of ice cream and fluid cream sales also are outside retail channels. In total, slightly less than half of milkfat and only slightly more than half of skim solids are now sold through retail stores.

Sustained economic growth has produced improved consumer incomes, strong stock prices, and low unemployment. Inflation and interest rates have stayed relatively

low. As a result, consumers have been in the mood to treat themselves and, atypically for this far into a growth period, have been boosting real expenditures for food. Spending for food away from home has grown fastest, although retail food expenditures have also increased. Dairy products are far from unique in benefiting from strong demand. High-quality beef, the more expensive cuts of beef and pork, and commercially prepared foods generally have been favored.

Since 1997, commercial use of cheese has grown by almost 5 percent per year, even though prices have been relatively high throughout most of that period. The strong restaurant market has increased cheese demand. Restaurants like cheese for its versatility and flavor, as well as for its prominent role in a number of ethnic cuisines. In particular, fast-food chains include cheese, often paired with bacon, as a component of their special feature sandwiches. Pizza sales and sales of commercially prepared entrees using cheese also continue to increase. This powerful demand for cheese supports dairy markets overall, since cheese now uses about half the milk supply.

Retail sales of cheese have increased, too, although these increases were somewhat more modest until weaker prices prevailed in 2000. Consumers have expanded their cheese buying for themselves and guests in their homes, although the increase in restaurant meals has limited these gains somewhat. Retail demand reportedly has been better for specialty cheeses than for the more common cheeses.

Despite almost constant buffeting by high (sometimes extremely high) and volatile prices in recent years, butter sales have

been brisk, rising 6 percent annually since 1997. Large shares of butter go into away-from-home eating, particularly in more expensive restaurants, and into more expensive prepared foods. Retail sales also have grown because butter is now seen as a "little luxury" consumers can afford. Fluid cream sales also have flowed briskly for many of the same reasons.

Not all dairy sales have been strong. Demand for dairy products sold mostly at retail generally has weakened. In recent years, fluid milk sales have been basically flat. Greater away-from-home eating has reduced fluid milk use because people tend to order other beverages in restaurants. Yogurt use has slipped somewhat since 1997. Retailers have become more restrictive about the space allocated to yogurt, and yogurt as a light lunch may have lost some popularity. Consumption of cottage cheese has been about steady.

Although regular ice cream consumption has risen (particularly premium ice creams), the overall frozen dessert category has stagnated. A strong economy is not necessarily good news for ice cream. Consumers perceive it as a "cheap luxury"—one they can easily afford to replace with more expensive treats.

The only major weakness in dairy demand has been for skim solids as ingredients in processed foods. Use of nonfat dry milk and other forms of skim solids grew during the early and mid-1990's because of the introduction and short-term popularity of nonfat and low-fat versions of foods. But the collapse in the market for most of these products has sharply reduced demand for skim solids as ingredients. In addition, substitution of whey solids (and possibly milk proteins) for skim solids has undergone one of its periodic surges. **AO**

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## Commodity Spotlight



### Cigarette Consumption Continues to Slip

In line with a set of related downward trends over the past several years, U.S. manufacturers are making fewer cigarettes, and those they are making contain increasingly less domestic and more imported leaf. In 1999, cigarettes made in the U.S. contained 48.5 percent foreign leaf, a record high. But some downward trends appear to be easing. Compared with 1999, U.S. demand for cigarettes through July 2000 was down only 1 percent; as of September, cigarette exports were holding at about 96 percent of the year-earlier level.

In 1999, the U.S. consumed an estimated 435 billion cigarettes (2,136 per person), 15 billion fewer cigarettes than in 1998. In 2000, consumers are projected to smoke about 430 billion cigarettes (2,103 per person). Behind the continuing drop in consumption lie spiraling cigarette prices, greater awareness of health risks, and continuing restrictions on smoking areas. Two years ago, manufacturers boosted wholesale prices to cover the expenses incurred from the 1998 tobacco agreement with state attorneys general. In 2000, Federal excise taxes went up 10 cents a pack; and cigarette prices continued to go up.

In 1999, cigarette exports also continued to decline, down 50 billion cigarettes from a 1996 peak of 250 billion. But even with demand for U.S. cigarettes lower in major markets such as Europe and Japan

and offshore production of U.S. brands higher, cigarette exports through September 2000 were about 96 percent of those in the same period during 1999.

Prospects for tobacco leaf exports have been looking up for 2000, as global supplies—copious in 1998 and 1999—seem to be more in line with demand. The 1997 figure of 490 million pounds (declared weight) had fallen to 420 million pounds by 1999. Still, smoking continues to decline in many countries that usually buy U.S. leaf, and with prices higher than world levels, it is difficult to pry open new markets. Some lower income countries are further put off by the absence of a U.S. Government credit program for tobacco exports (to guarantee commercial credit), which is forbidden by legislation.

Although many tobacco growers remain under financial pressure, these developments should have little adverse effect on the local economies of tobacco-producing areas. Since 1970, total personal income (in constant dollars) in the nation's 424 tobacco-growing counties has risen fairly steadily, with a cumulative increase of nearly 150 percent. Over the same period, tobacco sales have remained fairly

#### Tobacco Types

Tobacco is primarily grown in six states. North Carolina ranked first and Kentucky second, followed by Tennessee, South Carolina, Georgia, and Virginia. Tobacco is also grown in Maryland, Pennsylvania, Missouri, Indiana, Ohio, Wisconsin, Alabama, Connecticut, and Massachusetts. The two top states together accounted for 65 percent of total production in 2000.

Flue-cured and burley are the major types of tobacco grown in the U.S. and accounted for 92 percent of leaf production in 2000. Flue-cured tobacco, also known as Virginia-type tobacco leaf, is grown in the southeastern U.S. and cured under heat to achieve its world-renowned golden leaf. Burley tobacco—grown in Kentucky, Tennessee, Virginia, West Virginia, Indiana, Ohio, Missouri, and North Carolina—is air-cured; the leaf is hung in a well-ventilated barn during the curing process. Maryland, fire-cured, air-cured, and cigar types complete the remaining 8 percent.

Most flue-cured and burley is used in cigarette manufacture. Maryland leaf is used solely for cigarettes. Fire-cured and air-cured are used primarily for chewing, snuff, and pipe tobacco and roll-your-own-cigarettes. Cigar leaf is divided into three types: filler, binder, and wrapper, named after the three parts of a cigar. However, most binder and filler tobaccos are now used for chewing and smoking tobacco. Cigar wrapper leaf is in a class of its own, bringing prices 10 times that of other tobacco. Nearly all wrapper—grown under protective shade—is exported to cigar-producing countries.

## Tobacco Program Sets Quotas & Price Supports

The USDA tobacco program sets marketing quotas and price supports (loan rates) to benefit tobacco growers. Assessments levied on producers and buyers cover the costs of purchasing, processing, and storing tobacco until it is sold.

Marketing quotas limit how much tobacco—both flue-cured and burley—growers are allowed to sell. Four factors combine to set the quotas: manufacturers' purchase intentions, loan stocks, exports, and the discretion of the Secretary of Agriculture.

- Manufacturers' purchase intentions are the amount of tobacco leaf companies commit to buy and are established before the marketing year begins. Companies must purchase at least 95 percent of the amount declared in their purchase intentions or pay a penalty.
- Loan stocks are the amount of tobacco held by grower cooperatives just before the marketing quotas are set.
- The figure for each year's exports is the average of the 3 previous years' exports.
- The Secretary of Agriculture has the discretion to adjust the sum of the first three factors as much as 3 percent up or down.

Once the national marketing quota for each kind of tobacco is set, the figure is divided among growers in proportion to the acreage they devote to growing that kind of tobacco. Individual growers can market up to 103 percent of their share of the quota without penalty. The tobacco a grower markets above 100 percent in 1 year, or tobacco under-marketed down to 97 percent, is carried forward to the next marketing year. The effective quota is the marketing quota adjusted by net carryover held by individual farms. It is the quantity that can actually be marketed by producers.

The USDA tobacco program bases each year's price support (loan rate) for tobacco on the price support for the preceding year. The past year's figure is adjusted based on changes in two other figures: the 5-year average of market prices (omitting high and low years) and a cost-of-production index. The Secretary of Agriculture can set the price support between 65 and 100 percent of the calculated change. Price supports vary by the grade of leaf. The overall support price for a type of leaf—for example, burley—therefore, is the weighted average of the price support for each grade of that type. AF grade of that type.

constant in nominal dollars (\$2 billion to \$3 billion) and have declined in real (inflation-adjusted) terms.

Growth in off-farm income has been key to offsetting declines in tobacco revenue. Most tobacco is produced in or near expanding metro areas, with nearly three-fourths of estimated tobacco receipts originating in counties in or adjacent to small metro areas. This translates into greater economic opportunities for the grower—nonfarm jobs to supplement tobacco income, rising land values, and a customer base for fruits, vegetables, and pick-your-own or other onfarm business-

es, such as paid fishing or hunting. These small metro areas are near cities such as Richmond and Petersburg, Virginia; Raleigh, Durham, and Winston-Salem, North Carolina; and Lexington,

Louisville, Kentucky and Knoxville, Tennessee.

## Flue-Cured Sales Decline

Flue-cured and burley are the major types of tobacco grown in the U.S. and accounted for 92 percent of leaf production in 2000. The 2000 flue-cured markets closed on November 2. A relatively ideal flue-cured tobacco growing season in most areas led to one of the better quality crops in recent years, with only one producing area (Type 14—Georgia and Florida) undergoing drought conditions early in the growing season.

Sales of flue-cured tobacco at auction in 2000 totaled 513.8 million pounds, representing 92 percent of the marketing quota set for the year and 82 percent of the estimated crop of 623.8 million pounds. (The quasi-governmental Flue-Cured Stabilization Corporation offers to buy flue-cured tobacco that does not receive an auction bid higher than its government-set price support level.)

Both total volume and value of flue-cured varieties slid from 1999 numbers. The drop in volume was due to the 18-percent decrease set last year for the 2000 quota. Final gross volume sold at auction (including resales) totaled 574.7 million pounds, compared with 711.7 million pounds in 1999. The average price was 179 cents per pound, compared with 173.6 cents in 1999. Flue-Cured Stabilization Corporation loan takings—tobacco which fails to make the grade support level and is purchased under the tobacco program at its price support level—were 27.2 million pounds, compared with 136.4 million pounds in 1999.

## President Establishes Tobacco Commission

On September 22, 2000, President Clinton signed an executive order establishing the "President's Commission on Improving Economic Opportunity in Communities Dependent on Tobacco Production While Protecting Public Health." The Commission will (1) advise the President on changes in the tobacco farming economy and (2) recommend ways to improve economic opportunity and development in communities that rely on tobacco production without further exposing consumers, particularly children, to the hazards associated with smoking. The Commission held two public forums in November—one in Raleigh, North Carolina, and one in Louisville, Kentucky. The group is scheduled to submit a preliminary report to the president on December 31, 2000, and a final report no later than May 2001.

## Commodity Spotlight

Lower marketings and higher quality reduced loan takings.

The market for burley tobacco opened on November 20. Through December 13, gross sales totaled 169.7 million pounds, 223.8 million pounds less than the previous season. Prices are running higher than last season, and offerings were of higher quality. During the first 14 days of sales, the average price for burley was about 6.3 cents a pound greater than last season. Preholiday sales continued through December 14 and markets will reopen January 8. Before the holiday break, about 38 percent of expected production had been sold. Sales consisted of less fair- and low-quality leaf than last year.

### *Flue-Cured Marketing Quota Down for 2001*

On December 15, 2000, USDA announced the flue-cured marketing quota for 2001: 548.9 million pounds, 1 percent above 2000. The total national acreage allotment was set at 262,253 acres, 1 percent over 2000. However, higher onfarm carryover from 2000 will lower the effective quota (the amount of tobacco that can be marketed) to 543 million pounds or 3 percent below last season. (See sidebar on quota.)

Lower beginning stocks held by the industry will dampen flue-cured supplies (marketings plus beginning stocks) in 2001 by over 100 million pounds. Flue-cured supplies will be about 1.6 billion pounds.

USDA must announce the 2001 burley quota by February 1, 2001. Carryover on October 1, 2000, was 140 million pounds higher than a year earlier, as marketings exceeded use. Because this year's burley marketings are expected to fall short of the quota set for 2000, next year's quota for burley will likely be set higher. (A poor-quality burley crop in 1999 led to legislation that forgave the debt on more than 200 million pounds of burley loan stocks.)

Expected marketings in 2000 of about 420 million pounds of burley would result in burley supplies of 1.5 billion pounds, about the same as the previous year. However, with the disposition of forgiven 1999 burley loan takings uncertain, supplies could range as low as 1.26 billion pounds if the forgiven tobacco is destroyed, which is likely. **AO**

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## World Agriculture & Trade



Dennis A. Shields

# WTO Negotiations: Potential Gains from Ag Policy Reform

The World Trade Organization (WTO) opened global trade negotiations on agriculture in Geneva in March 2000. The negotiations are expected to address national agricultural policies related to market access limits (tariffs, tariff-rate quotas, and other trade barriers), domestic support to agricultural producers, and export subsidies.

Agricultural trade barriers and producer subsidies inflict real costs, both on the countries that use these policies and on their trade partners. Trade barriers help keep inefficient domestic producers in operation, result in forgone opportunities for more efficient allocation of national resources, and lower demand for trade partners' products. Trade-distorting domestic subsidies can induce an oversupply of agricultural products and keep resources in agriculture that could be employed more profitably elsewhere.

Oversupply of agricultural commodities leads to low prices and increased competition for producers in other countries and can create the need for export subsidies to dispose of excess domestic production. Consumers are harmed not just by the direct effect of tariffs in raising the cost of imports, but also by inefficiencies in their economy that result from tariffs and sub-

sidies. When an economy is performing below its potential, consumers' income and welfare are reduced.

New negotiations present an opportunity to achieve further reductions in global trade-distorting agricultural policies. Under terms of the Uruguay Round Agreement on Agriculture (URAA), negotiations will include some "built-in" agenda items—i.e., member countries' experiences with implementation of Uruguay Round commitments; effects of URAA reduction commitments on world trade in agriculture; nontrade issues such as environmental protection and food security; and provisions for special and differential treatment of developing countries.

### *Gains of URAA Have Proven Fragile*

The Uruguay Round of the General Agreement on Tariffs and Trade (GATT) ended in 1993 having fundamentally altered the treatment of national agricultural policies under multilateral rules of global trade. In the Agreement on Agriculture, members determined that trade-distorting agricultural policies should be disciplined or constrained, so that market forces rather than government

intervention can increasingly drive agricultural markets.

In committing to greater market access, members agreed to reduce tariffs by 36 percent, on average, (24 percent for developing countries) and to convert most non-tariff barriers to tariffs or to a two-tier tariff system called tariff-rate quotas (TRQ's). TRQ's allow a limited quantity of imports to enter a country at a relatively low tariff, with higher tariffs imposed on over-quota imports.

Member countries also agreed to reduce their aggregate levels of trade-distorting domestic support to agriculture by 20 percent (13 percent for developing countries). In addition, both the value and volume of subsidized exports were placed under limits scheduled to decline through the end of the URAA implementation period. Developed countries implemented URAA reform commitments during 1995-2000, and less developed countries will continue the process through 2004.

The experience to date from implementation of the URAA has demonstrated that policy reform is difficult to achieve. Global agricultural tariffs remain high, and there is substantial disparity in tariffs among countries and across commodities. For example, the average U.S. agricultural tariff is relatively low (12 percent) compared with 21 percent for the European Union, 24 percent for Canada, 33 percent for Japan, and 152 percent for Norway. The global average rate is 62 percent. High import tariffs imposed by U.S. trade partners are a significant impediment to U.S. agricultural export growth.

Disparities across commodities within countries' tariff codes can intensify the distorting effects of tariffs. For example, escalation of a country's tariffs between bulk commodities and processed agricultural products—i.e., a higher effective rate of tariff protection on the final product than on inputs—can significantly affect trade in processed products, a fast growing but price-sensitive component of global agricultural trade. And while tariff-rate quotas have replaced many nontrade barriers, some have complicated import regimes, often with rules that are not easy to understand, and many have very high upper tier rates.

## World Agriculture & Trade

### World Trade Organization Negotiations on Agriculture: Process and Objectives

Venue	Special sessions of WTO Committee on Agriculture, Geneva, Switzerland
Objectives	Continue the process of reform begun in the Uruguay Round Agreement on Agriculture (URAA), taking into account experiences with URAA trade barrier reductions, effects of the URAA on world agricultural trade, nontrade issues such as environment and rural development, special and differential treatment of less developed countries, and other concerns.
Scheduled meetings	Phase I meetings: <b>2000</b> — March, June, September, and November <b>2001</b> — February, March, June, September, and November
Country proposals	To be submitted to the WTO by December 2000 (with some flexibility through March 2001). Proposals are available at <a href="http://www.WTO.org">www.WTO.org</a>

Source: WTO Secretariat.

Economic Research Service, USDA

Domestic farm support levels declined early in the implementation period, helped by strong world prices. Also, many countries chose to adopt less distorting types of domestic subsidies that are exempt from URAA limits. For example, some countries have reduced their reliance on subsidies that are directly linked to the production of specific crops, and instead provide payments that are not dependent on farmers' current decisions about which crop or how much to produce. The shift toward less distorting (exempt) programs has been influenced at least in part by URAA principles. However, since 1998, global expenditures on trade-distorting types of domestic support have increased in response to low world prices.

The URAA placed limits on export subsidies for individual commodities, but allowed for some flexibility. Lower usage levels early in the URAA implementation period, when prices were high, enabled some members to bring forward unused levels and recently apply the subsidies when prices were low and ceilings had been reached.

### Calculating the Benefits Of Ag Policy Reform

Despite gains made by the URAA, remaining global agricultural policy distortions impose substantial costs on the world economy. Agricultural tariffs, domestic support, and export subsidies

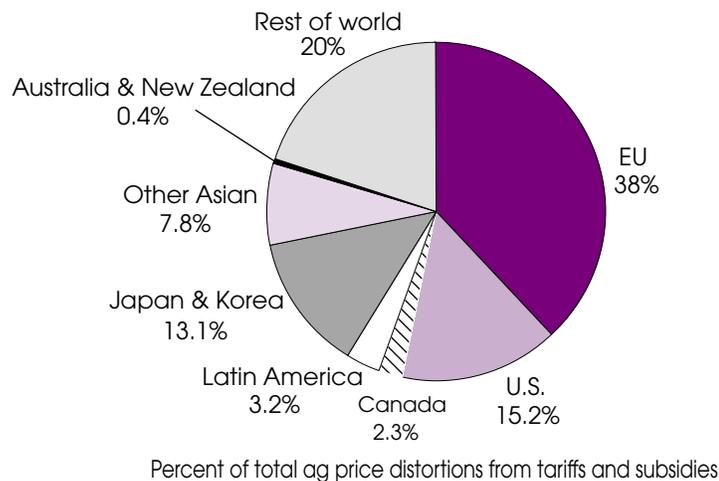
push world agricultural prices to about 12 percent below what they would otherwise be, according to recent analysis by USDA's Economic Research Service. Studies show that over the long term (about 10-15 years) trade-distorting policies will result in a reduction in world welfare (loss in consumer purchasing power) of \$56 billion annually, which represents about 0.2 percent of global GDP.

Most of the agricultural market distortions, as measured by world price effects, are attributed to a small number of countries. Developed economies account for nearly 80 percent of world price distortions. The European Union (EU) accounts for 38 percent, the U.S. 15 percent, Japan plus Korea 13 percent, and Canada 2 percent. These countries typically employ different mixes of price-distorting policies. For example, export subsidies are an integral part of the EU's domestic price support system. As a result, the EU alone accounts for more than 90 percent of global export subsidy expenditures.

The EU and the U.S. together account for most of the global distortions related to domestic producer support. Most other countries rely mainly on tariffs to support their farm sectors. Particularly in developing countries, tariffs are a more practical farm support policy because they raise government revenue, while domestic programs entail government expenditure. But tariffs are a potentially more distorting type of farm support than domestic producer subsidies, because they directly affect consumers as well as producers.

There are two dimensions in calculating potential welfare gains to an economy from further policy reform. The first

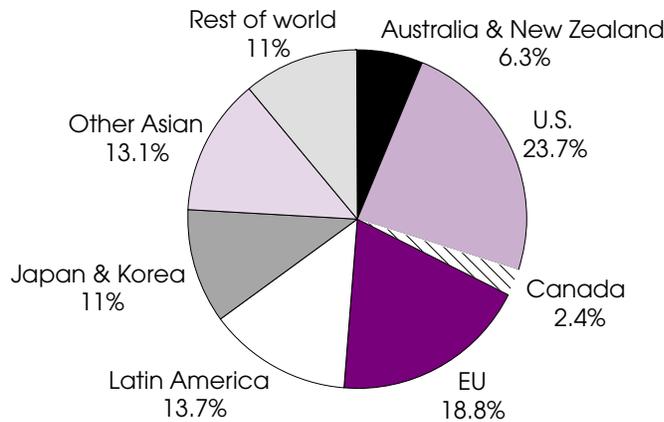
### Economies Around the World Contribute to Ag Price Distortions from Tariffs and Subsidies



Note: Distortions from agricultural tariffs, domestic support, and export subsidies cause world agricultural prices to be 12 percent below the level they would otherwise be.

Economic Research Service, USDA

## Many Countries Would Share Consumer Purchasing Power Gains From Elimination of Ag Tariffs and Subsidies



Estimated annual gain in consumer purchasing power = \$56 billion

Economic Research Service, USDA

relates to removing distortions in consumption and production decisions. These are the “static” gains in welfare (purchasing power) that accrue after producers and consumers fully adjust to changes in prices when tariffs and subsidies are removed. Despite higher world food prices, consumers in most countries would benefit from static gains because tariff elimination lowers consumer prices of imported foods and because policy reforms increase overall economic efficiency. Static welfare gains worth about \$31 billion annually to the world economy would accrue over time and reflect increases in income (wages and return on investment) relative to expenditure.

Most static gains from trade liberalization would accrue to countries with the largest initial policy distortions. Developed countries receive most of the global static welfare gains from full policy reform (\$28.5 billion annually), compared with potential welfare gains for developing countries of about \$2.6 billion. Some agricultural importing countries that face higher world prices but have few domestic policy distortions would realize static welfare losses from full trade liberalization.

The second dimension in calculating benefits of global policy reform involves dynamic gains—i.e., long-term effects of increased investment and the opportunities for increased productivity that are linked

to more open economies. All countries can benefit from the potential dynamic gains of global policy reform. Reforms lead to greater investment by increasing potential returns, and additional investment increases the productive capacity of economies. Developing countries in particular, which have substantial potential for productivity gains from technological change, stand to benefit directly from more openness to the rest of the world.

If developing countries eliminate their own agricultural import barriers and are thereby more exposed to products and competition from more advanced economies, they can increase their economy-wide productivity by accelerating their rate of learning new skills and by adopting more advanced technologies that are embodied in imports from more developed countries. Reflecting their greater dynamic potential for growth, these economies are expected to draw increased global investment, increasing their resource availability and realizing static and dynamic gains totaling \$21.3 billion. Developed countries will benefit by enhanced investment opportunities. Dynamic gains—investment and productivity growth—due to policy reform account for about 45 percent of total benefits from full trade liberalization.

Over the long term, full elimination of agricultural price distortions would lead

to an increase in world welfare, or consumer purchasing power, of \$56 billion annually, with nearly one-fourth accruing to the U.S. Because U.S. tariffs, domestic support, and export subsidies are relatively low, most of the benefit for the U.S. would come from policy reforms in U.S. trade partners.

Because of its technological maturity, the U.S. will not enjoy substantial direct benefits from dynamic gains. But U.S. agriculture will benefit from dynamic gains in developing countries that import U.S. farm products as growth in demand increases in those economies. In the long run, full policy reform could lead to higher world prices for U.S. farm exports, the real value of U.S. agricultural exports could be 19 percent higher each year, and U.S. agricultural imports could be up 9 percent.

Movement toward a more market-oriented and orderly global agricultural trading system is important for the U.S. because of the large and increasing role of trade in U.S. agricultural production and food consumption. As technological advances and increased productivity lead to higher levels of production, expanding export markets provide an outlet for U.S. food and agricultural products. For consumers, trade rules help to ensure access to a safe, varied, and abundant year-round supply of food.

Global policies that distort agricultural trade impose substantial long-term costs on U.S. producers, consumers, and the world economy. U.S. agricultural tariffs and subsidies are relatively low, suggesting that U.S. domestic adjustments to its own reform commitments are likely to be small relative to the potentially large benefits of global reform. Furthermore, reforms of U.S. policies within a global framework can help to ensure the overall, long-term competitiveness of the U.S. farm sector in world markets. **AO**

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## Farm & Rural Communities



### Hired Farm Labor: Comparing the U.S. & Mexico

**A**s unprecedented economic expansion continues in the U.S., employers face increased competitive pressures to obtain workers necessary for their businesses. In this competitive environment, U.S. farmers are holding their own, securing similar numbers of hired laborers as in previous years and able to provide wage increases that generally keep pace with the cost of living. However, U.S. farmers rely heavily on foreign-born workers, most of whom come from Mexico and many of whom lack legal authorization to work in the U.S. This phenomenon appears to be more prevalent than in the past and reflects wage differentials for farm labor between the U.S. and Mexico, as well as differences in employment prospects.

In contrast, Mexican agriculture has access to a sizable pool of native-born workers. Farmworkers in Mexico, as in the U.S., typically complement their employment in agriculture with nonfarm work. But unlike in the U.S., farmworkers are in relatively plentiful supply in Mexico and provide a stable, legal source of labor for agriculture. This will benefit Mexican farmers as they seek out new export markets. Differences in the availability of farm labor affects the economic health of agriculture in both Mexico and

the U.S., including the extent to which agricultural producers participate in international markets.

#### *Characteristics of Hired Farm Labor*

U.S. agriculture employed an average of 890,300 hired farmworkers in 2000, according to USDA's National Agricultural Statistics Service (NASS). The number of hired farmworkers fluctuates seasonally, from roughly 700,000 in January to 1.1 million in July. Semi-annual data suggest an upward trend in the numbers of hired farmworkers from 1996 to 1999, followed by a decrease in 2000.

In October 2000, the average wage for hired farmworkers in the U.S. was \$8.29 per hour. Wages for field and livestock workers were generally lower, averaging \$7.76 per hour. (The average wage for hired farmworkers does not reflect housing and food benefits that some farmworkers receive from their employers.) At the same time, the average wage outside agriculture was \$13.69 per hour and the Federal minimum wage was \$5.15 per hour. Like the total number of hired workers, the wage for hired farm labor fluctuates seasonally, but has tended to keep pace with the cost of living since 1996.

The relatively high agricultural wage rates in the U.S. attract foreign-born farmworkers, especially from Mexico. According to data from the Department of Labor's National Agricultural Workers Survey (NAWS), people born in Mexico made up 78 percent of all U.S. farmworkers in crop agriculture in fiscal year (FY) 1998, up from an annual average of 68 percent during FY's 1993-95. People born in Central America constituted an additional 3 percent of farmworkers in crop agriculture. NAWS data also show that 57 percent of Mexican-born farmworkers were undocumented (i.e., lacked legal immigration status) in FY 1998, compared with an average of 51 percent during FY's 1994-95. The figures are similar for all foreign-born farmworkers in U.S. crop agriculture—i.e., 57 percent were undocumented in FY 1998, up from an average of 50 percent during FY's 1994-95.

Off-farm employment provides an important supplement to agricultural earnings for both native and foreign-born farmworkers. During FY 1998, farmworkers in U.S. crop agriculture were employed for an average of 34 weeks in the U.S.—31 weeks in agriculture and 3 weeks in non-farm employment. An additional 8 weeks were spent in the U.S. not working, and 9 weeks were spent outside the country. U.S.-born farmworkers devoted a greater portion of the year to nonfarm employment, while the foreign-born, not surprisingly, spent a greater portion of the year abroad. Among foreign-born farmworkers, time spent abroad averaged 11 weeks in FY 1998, up from an average of 8 weeks during FY's 1993-94. Possible explanations for this shift include heightened enforcement of U.S. immigration restrictions; improved economic conditions abroad that lure foreign-born workers to jobs in their home countries; and the possibility that increased U.S. earnings, either from farm or nonfarm employment, allow foreign-born farmworkers to spend more time in their native countries.

In Mexico, agriculture employed about 2.3 million people above the age of 12 as hired laborers in 1998, according to the Mexican Secretariat of Labor and Social Provision's *Encuesta de Empleo* (Employment Survey). An additional 136,000 workers performed specialized tasks in agriculture, such as the operation of machinery, and another 3.5 million

## Farm &amp; Rural Communities

Mexicans worked without pay in the farm operations of their families. The potential pool of agricultural workers in Mexico thus consists of almost 6 million people.

Agricultural employment in Mexico decreased 0.7 percent between 1996 and 1999, due primarily to urbanization absorbing land and labor in the states of central Mexico. In these states, agricultural employment is falling at an average annual rate of 7.6 percent. In the rest of the country, however, agricultural employment is growing at an annual average rate of 3.8 percent.

Agriculture employs a large proportion of the population in some parts of Mexico. This is particularly true in the southern states, which have relatively high levels of poverty and a larger indigenous population. For example, agriculture represents 56 percent of employment in Chiapas, Mexico's poorest state.

Labor productivity in Mexican agriculture is roughly one-fifth the productivity in the rest of the economy. About 20 percent of the workforce is engaged in agriculture, but the sector contributes just 5 percent of GDP. Labor productivity tends to increase as production shifts from basic grains to more export-oriented crops such as fruits and vegetables. Government efforts to raise productivity in agriculture concentrate on training and technology transfer

by private extension services supported by the Mexican government.

The wage differential between Mexican and U.S. agriculture is huge. The daily wage for 8 hours of farm work in Mexico is about \$3.60 in U.S. currency, compared with the U.S. average of \$66.32 in October 2000. However, these figures overstate the real wage differential between Mexican and U.S. agriculture, because the cost of living in Mexico is lower than in the U.S.

Agricultural wages in Mexico decreased in real terms at an average annual rate of 4.3 percent between 1989 and 2000, while wages in manufacturing rose at an average annual rate of 0.6 percent. Despite this growing disparity, there is little evidence of a single commodity or activity in Mexico's agriculture facing difficulties in obtaining hired labor.

Labor markets are highly seasonal in Mexican agriculture. Most rural workers are employed part-time in agriculture and work the rest of the time in nonagricultural sectors such as construction, manufacturing, and services, particularly in the southern states where there is only one crop-growing season due to limited infrastructure for irrigation. Rural workers generally shift from one economic activity to another, and usually none of these activities becomes a permanent job.

Some rural Mexicans—mostly young people—leave their villages in search of employment and find work in a wide variety of economic sectors, either in Mexico or the U.S. Personal contacts and social networks often are deciding factors in the search for work. Of the 2.3 million hired farmworkers in Mexico, around 1.4 million are migrants, most of whom range in age from the early 20's to mid-30's.

The migration of farmworkers within Mexico follows three main routes, generally from communities of origin in the south to farm operations in the north. Along the Pacific coast, migrants work seasonally in the production of fruits and sugar cane, and year-round in vegetables. In north-central Mexico, migrant labor helps produce key crops such as cotton, apples, and various vegetables, primarily between August and January. Along the Gulf coast, farm operators employ migrants to produce sugar cane, cotton, oranges, and coffee, except during July, August, and September.

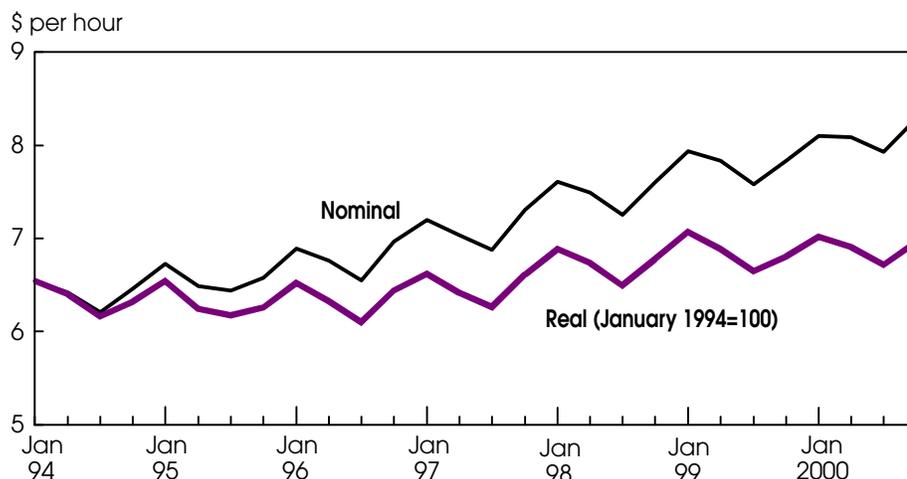
### *The Link Between Farm Labor & Trade*

Hired farm labor is a major input for U.S. agriculture. The most recent U.S. census of agriculture indicates that expenditures for hired farm labor in 1997 totaled \$14.8 billion, 10 percent of total farm production expenses. Hired labor is the third largest of the expenditure categories defined by the census, following livestock and poultry and animal feed.

Hired labor accounts for an especially high percentage of production expenses in three sectors of U.S. agriculture—greenhouse, nursery, and floriculture (40 percent); fruit and tree nut farming (27 percent); and vegetable and melon farming (23 percent). Each of these sectors is engaged in international trade, with both exports and imports of vegetables and preparations experiencing particularly rapid growth during the 1990's.

Trade in these sectors runs in both directions. In 1999, the U.S. was a net exporter of fruits and preparations and of nuts and preparations, and a net importer of vegetables and preparations and of nursery and greenhouse products. Thus, changes

### Wage Gains for Hired Farmworkers Have Kept Pace with Inflation



Source: Quarterly data from USDA's National Agricultural Statistics Service and the Bureau of Labor Statistics. Economic Research Service, USDA

## Farm & Rural Communities

### Farmworkers in U.S. Crop Agriculture Average 8 Months of Work per Year

	In U.S.				Unaccounted
	Farm work	Nonfarm work	Not working	Abroad	
	Weeks				
All farmworkers	31	3	8	9	1
U.S.-born	30	4	13	3	1
Foreign-born*	31	2	7	11	1
Undocumented	29	2	5	15	1

\* Primarily Mexico-born.

Data for fiscal year 1998.

Source: National Agricultural Workers Survey, U.S. Department of Labor.

Economic Research Service, USDA

in the availability of hired farm labor are likely to influence U.S. trade in these sectors and the extent to which imports meet domestic food consumption needs.

Increased availability of hired farm labor should facilitate greater domestic production of these labor-intensive products, while decreased availability should have the opposite effect.

During the 1990's, the Mexican government intensified its efforts to orient the country's agricultural sector toward the export market. By pursuing Mexico's comparative advantages in fruits, vegetables, and some specialized processed foods, the government expected to increase rural income and employment, reduce migration from rural areas, and alleviate poverty.

Agricultural labor has provided an important base for these efforts, since the production of fruits and vegetables in Mexico is labor intensive relative to other agricultural commodities, just as it is in the U.S. For fruits and vegetables, the labor requirement from soil preparation to harvest ranges from 42 worker-days per hectare for carrots to 216 per hectare for tomatoes. In contrast, wheat, sorghum, and barley each require about 10 worker-days per hectare. Maize and beans, two traditional staples of Mexican agriculture, require 26 and 22 worker-days per hectare.

To secure greater market access for its agricultural products, Mexico negotiated a series of free trade agreements with 34 countries. The most prominent of these accords, the North American Free Trade Agreement (NAFTA), was implemented in 1994 and provides for substantially

freer trade among Canada, Mexico, and the U.S. In addition, a culture of standards and quality high enough to enable Mexico's products to compete in international markets has emerged and is spreading rapidly.

Within this context, the modern sector of Mexico's agriculture is capturing the benefits of freer trade while offering seasonal employment to farmworkers from the traditional agricultural sector. Export growth of several labor-intensive commodities has been dramatic. Mexico's asparagus exports climbed rapidly between 1993 and 1999, rising from \$41 million to \$248 million. Also, tomato exports from Mexico averaged \$555 million annually

during 1995-99, compared with an annual \$395 million in 1993-94. However, the gap between modern and traditional farms has widened due to large differentials in organization, technology, and financing.

### Keys to the Future

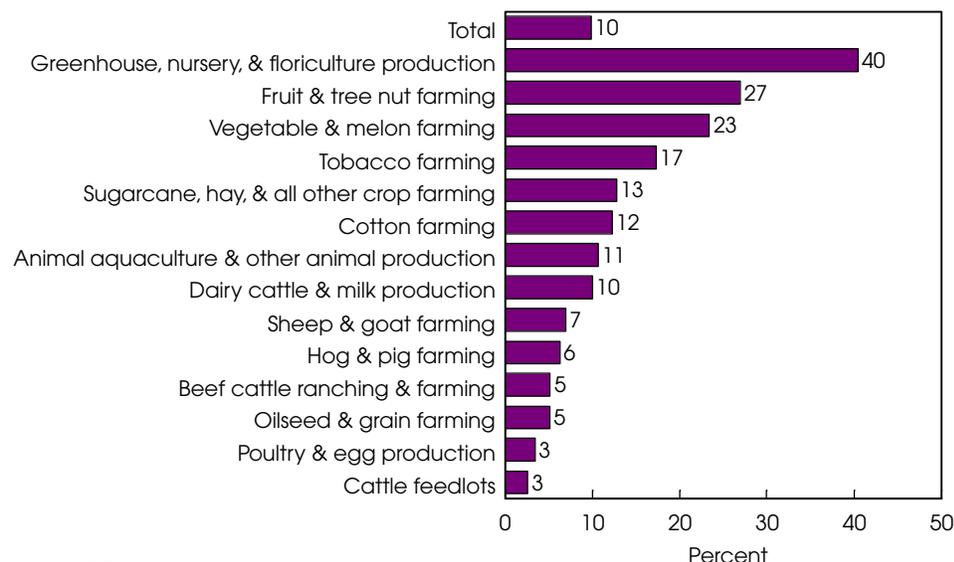
Factors that influence the market for hired farm labor also affect the future of agriculture in both Mexico and the U.S. Some of these factors are specific to agriculture; others are related to the general economy and government policy.

**Commodity prices.** The demand for hired farm labor and other inputs is influenced, in part, by the value of farm output. Thus, when commodity prices are low, wage rates for hired farmworkers are more likely to be low. Similarly, a marked upswing in commodity prices would strengthen the demand for hired labor and place upward pressure on wages. This effect would be felt most strongly in the labor-intensive sectors of U.S. and Mexican agriculture.

### Technologies that substitute for labor.

The pace at which technologies that substitute for labor are implemented is likely to differ between Mexico and the U.S. due to the different resource endowments

### Hired Labor as Share of U.S. Production Expense Was Highest for Greenhouse and Nursery, Fruit and Vegetable Farms, Lowest for Livestock in 1997



Source: 1997 Census of Agriculture.

Economic Research Service, USDA

Farm & Rural Communities

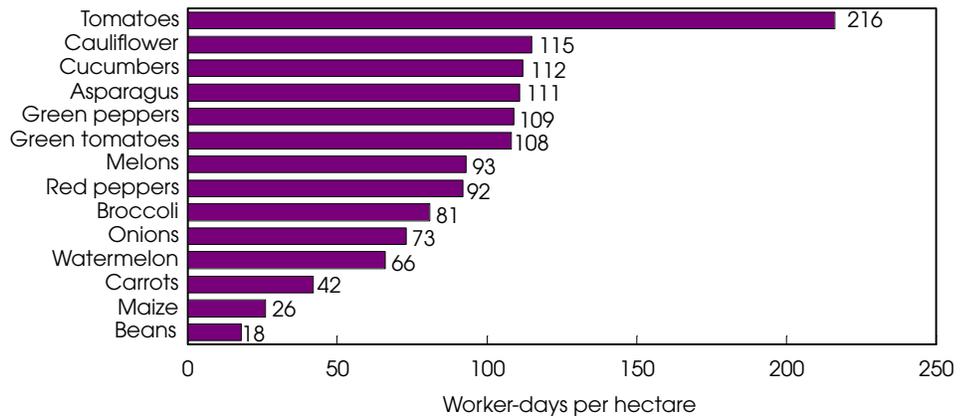
of the two countries and their disparate levels of economic development. However, with freer trade and more integrated markets under NAFTA, new technologies should be available at roughly the same time to producers in all three NAFTA countries, regardless of whether they originate in Canada, Mexico, or the U.S. Ultimately, the pace of technological change is likely to be dictated by the potential impact of new technologies on farm balance sheets, as well as perceptions of farm operators about the future availability of farm labor.

**Differential wage rates.** The extent to which agriculture is able to obtain the services of hired labor depends in part on the attractiveness of relative compensation offered for farm work versus nonfarm jobs. This is particularly true in the U.S., where labor markets are relatively tight. Compared with agricultural work, non-farm jobs in the U.S. tend to offer higher wages, as well as year-round employment, employee benefits, and more predictable working conditions. Where workers have a choice, these attributes likely draw some prospective farmworkers away from agriculture, including both U.S. natives and persons born abroad.

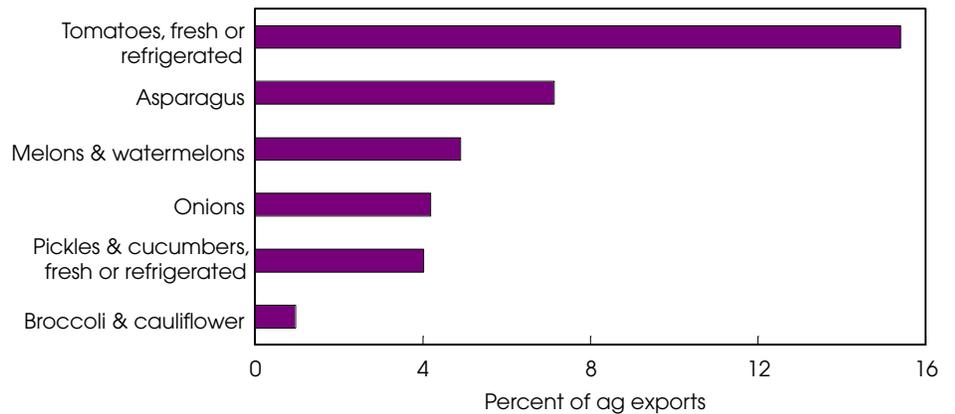
In 1999, median weekly earnings for full-time workers engaged in farm work and full-time workers in all occupations differed by \$255, as measured in October 2000 prices. Over the last 10 years, this gap has not changed appreciably when earnings are adjusted for inflation. Between 1990 and 1999, the farm-non-farm differential ranged from a low of \$247 in 1990 to a high of \$264 in 1992.

The wage differential narrows considerably when earnings of farmworkers are compared with workers in nonfarm occupations that require little or no advanced education. While drywall installers, construction laborers, and butchers and meat cutters earn substantially more than farmworkers, the earnings of janitors and cleaners and textile sewing machine operators are comparable to those of farmworkers. Moreover, these figures may misstate the actual earnings differential since they do not account for regional differences in the cost of living. Nevertheless, these statistics provide further evidence that U.S. agriculture has the capaci-

**Some Highly Labor-Intensive Commodities Produced in Mexico...**



**... Are Important to Mexico's Agricultural Exports**



Total agricultural and forestry exports in 1999=\$3.5 billion. 1 hectare=2.5 acres. Source: Worker-days from National Institute of Agricultural, Livestock, and Forestry Studies (INIFAP) and Postgraduate College, 1994. Share of agricultural exports based on data from Mexico's Secretariat of Economy and National Institute for Geography, Statistics, and Informatics (INEGI).

Economic Research Service, USDA

ty to compete in the market for hired labor.

**The promise of prosperity in Mexico.** Sustained expansion of Mexico's economy, accompanied by real growth in wages and salaries, should diminish the relative appeal of the U.S. labor market and draw workers back to jobs in Mexico. In early 1996, the Mexican economy began a gradual recovery from the recession caused by the peso crisis. During the first three quarters of 2000, Mexico's annual rate of real GDP growth has exceeded 7 percent, compared with an average annual rate of 5.1 percent from first-quarter 1996 to fourth-quarter 1999. Wage growth, however, has been slow to follow.

Economic growth in Mexico is likely to be accompanied by continued efforts to broaden the country's economic development. Increased public and private investment in the poorest areas of the country should reduce outmigration from rural Mexico to urban areas.

In addition, illiteracy among some rural workers has been a major constraint inhibiting the transfer of labor from agriculture to more productive sectors of the Mexican economy. Public expenditures in education and training should enable rural Mexicans to increase their off-farm work activities and to obtain better paying jobs.

As urbanization absorbs land and labor from rural Mexico, jobs in Mexican agri-

## Farm & Rural Communities

### U.S. Farmworker Wages Are Comparable to Some Nonfarm Jobs Requiring Little Formal Education



Source: Selected wage rates from Bureau of Labor Statistics, *Employment and Earnings*.  
Economic Research Service, USDA

culture could become more available to less skilled urban workers. Continued public and private investment in infrastructure, such as roads and communications, should facilitate labor mobility between regions and link areas of economic activities.

#### **Mexican financial development.**

Agriculture in Mexico is a very risky business. As a result, private financial capital does not usually flow to agriculture, except for large and modern farms. Mexico's system of public "development banks" is in poor health, although various trust funds have been created to restructure bad loans and to write off certain

debts for agricultural producers. The development of a stronger and more vibrant financial sector in Mexico is likely to increase capital flows to agriculture, thereby increasing agricultural activity and employment.

**Immigration policy.** In recent years, U.S. decisionmakers have considered a wide range of legislative proposals concerning the status of foreign farmworkers. Most of the proposed legislation would increase the number of authorized foreign-born farmworkers in the U.S., either by providing legal immigration status to some number of undocumented persons already in the country or by allowing additional

The U.S. Department of Labor conducts the annual National Agricultural Workers Survey (NAWS) to examine the demographic and employment characteristics of farmworkers in crop agriculture, including field workers in nursery products, cash grains, field crops, and all fruits and vegetables, along with field packers and supervisors. NAWS does not include secretaries or mechanics employed by farm operations or workers in the H-2A program. The H-2A program enables U.S. employers to hire temporary, nonimmigrant farmworkers from abroad if they can certify that sufficient laborers are not available in the U.S. and that employment of these workers will not adversely affect wages and working conditions of U.S. workers.

workers to enter the U.S. temporarily as guestworkers. Mexico's president advocates a long-term goal of transforming NAFTA into a common market in which labor would move freely across national boundaries. **AO**

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### Hired farmworkers make up about 30 percent of the U.S. farm work force

For data and details on:

*their ethnicity and nationality...  
their ages and wages...  
and other characteristics...*

See the recently released Economic Research Service report  
**Profile of Hired Farmworkers, 1998 Annual Averages**

Available online at [www.ers.usda.gov/Publications/AER790/](http://www.ers.usda.gov/Publications/AER790/)  
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## EU Enlargement: Negotiations Give Rise to New Issues

The European Union (EU) continues active negotiations with 10 countries of Central and Eastern Europe (CEE) for membership in the EU. Negotiations began in March 1998 with five CEE's (Poland, Hungary, Czech Republic, Slovenia, and Estonia). In October 1999, the EU agreed to open negotiation with five others—Latvia, Lithuania, Slovakia, Bulgaria, and Romania. Cyprus and Malta—two non-CEE states—are also candidates for membership.

In 1999, USDA's Economic Research Service (ERS) analyzed implications of the enlargement of the EU by inclusion of the first five CEE candidates (*AO* December 1999). Economic model results suggested that EU enlargement could bring increased regional surpluses of beef, pork, and rye, but could also reduce surpluses of wheat. Recent developments differ from some of the assumptions underlying that analysis and thus some of its predictions.

Accession will most likely be delayed from earlier expectations and will probably include a transition period. EU negotiators have also expressed reluctance to grant CEE producers (farmers) the full range of Common Agricultural Policy (CAP) support immediately on accession. In addition, depreciation of the euro (the EU's new unitary currency) since 1999 means that the gap between CEE and the generally higher EU prices has narrowed considerably, and that higher prices anticipated by CEE producers upon accession may not materialize. Another important issue is the eventual levels at which CEE supply controls are fixed. All these factors could dramatically alter the impacts of accession on agriculture in Europe.

### *Accession Not Likely Until At Least 2005 . . .*

On November 8, 2000, the EU Commission issued its annual set of reports on the readiness of each candidate-country for membership. A major disappointment for all the CEE's was the refusal of the EU to name a definite date for accession. EU officials state that they are hopeful that negotiations with the first group will be completed by the end of 2002. But all the EU member countries must then ratify the agreement, and this process could take up to 18 months. Thus, 2004 seems to be the earliest realistic date for enlargement of the EU with at least some of the 10 CEE candidate countries. Other EU officials say that 2005 is the first feasible date for accepting new members.

The reports praised most of the candidate countries for substantial progress toward harmonizing their legislation with that of the EU, but pointed out that all have more work to do in setting up structures needed to implement EU programs. The EU criticized nearly all the candidate countries for failure to guarantee the rights of minorities (principally the Roma), implement EU environmental standards, and battle corruption. In general, the EU



Nancy J. Cochrane

Commission considered Hungary and Estonia to be the most ready for accession. Poland, Slovenia, and the Czech Republic also have a realistic chance for early accession, and Slovakia and Latvia are not far behind.

Although the report on Poland still included that country in the list of countries almost ready for accession, the EU remains deeply concerned about lagging productivity in Poland's agricultural sector. The EU Commission insists on faster progress toward farm consolidation and a reduction in the labor force employed in agriculture.

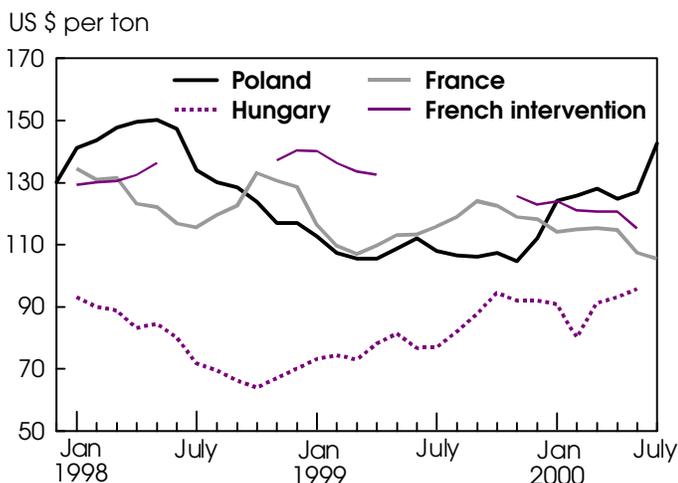
A delay in accession will give the CEE's more time to undertake institutional reforms needed to enable their farmers to compete in a single market. EU officials have also hinted that a delay in the accession timetable could make it more likely that CEE producers could receive compensation payments upon accession. The budget in Agenda 2000 (agricultural and financial policy reforms to the EU's CAP) included substantial outlays to aid infrastructure development in the initial years of accession; it was envisioned that these outlays would begin in 2002 or 2003. Delays in accession beyond the year 2002 means that funds budgeted for 2002-04 would not be used. EU Agricultural Commissioner Franz Fischler has suggested that these savings could be redirected to provide higher direct payments for CEE producers. However, such a redirection of funds would have to be approved by the EU member states.

### *. . . But Price Gaps Are Narrowing*

As accession is delayed, the gap between CEE and EU producer prices continues to narrow to the point where it is entirely possible that in 2005 or 2006 any price gaps will be negligible, prima-

## Special Article

### Gap Has Narrowed Between Wheat Prices in Eastern Europe and France



Producer prices in Poland, Hungary, and France. French intervention price supports market prices.

Sources: Agra Europe and Polish and Hungarian Statistical Bulletins.

Economic Research Service, USDA

rily because of continued depreciation of the euro. (Since launching of the euro in January 1999, its value had fallen from \$1.16 to \$0.85 by November 2000.) For example, in April 1999, the EU intervention wheat price was 70 percent above the Hungarian producer price. (The intervention price is the market floor price, less quality discounts, that triggers intervention mechanisms to support market prices.) In April 2000, the difference was just 29 percent, and the Polish wheat price was well above the EU intervention price. Patterns are similar with the prices of beef, pork, and feed grains.

The principle impact of a narrowing price gap will be to reduce potential pork and beef surpluses. Production will rise less than projected in 1999, and domestic consumption will not decline as much as projected earlier. Likewise, grain surpluses will be lower than earlier projected, although there could still be a shift from wheat to feed grains. Agenda 2000 establishes the same intervention price for wheat, barley, and corn. CEE feed grain prices are currently well below CEE wheat prices. As a result, the ratio of feed grain prices to wheat prices will shift in favor of feed grains.

#### *Transition Periods Now Likely*

In initial discussions about enlargement, both CEE and EU officials insisted that there be no transition period. CEE producers would immediately be eligible for all CAP support. But they would have to implement all EU legislation and regulations upon accession.

Both sides are now talking openly about the possibility of a transition period. For political and strategic reasons, the EU wants to move as quickly as possible to admit new members. At the same time, the November 8 reports point to a number of areas where

candidate countries still need to improve. In tacit recognition of the immense challenge of implementing the full range of EU regulations, EU officials are now saying that a transition period may be necessary.

A transition period, however, means different things to the EU and the candidate countries. The EU has implied its willingness to allow a transition period for CEE candidates to implement environmental regulations that will require very large investments. But the EU also seeks a transition period before the CEE's are eligible for the full range of CAP benefits, including a 10-year period before CEE producers are eligible for compensation. In fact, one Polish analyst insists that the EU budget in Agenda 2000 does not even contain funds needed to provide any compensation payments to Polish farmers until at least 2010.

The CEE's all insist that they receive the full range of benefits immediately upon accession, but have requested transition periods for meeting some of the requirements for accession. Poland and Hungary have both requested the following:

- a transition period (18 years for Poland, 10 years for Hungary) before foreigners be allowed to purchase land;
- a 3- to 5-year period in which to meet the full range of quality standards for meat and milk, during which time those products not meeting EU standards would be sold only on the domestic market; and
- permission to sell meat not meeting EU standards to third countries during the transition period.

In addition, Hungary has requested exemption of existing wine stocks from EU standards until stocks are depleted.

Extra time to comply with EU sanitary regulations would ease the burden on smaller livestock producers and processors of the CEE's. Roughly half of Poland's meat output and 40 percent of Hungary's comes from processing plants that do not meet EU standards. Owners believe the investment needed to bring their plants into compliance is so prohibitive that they would have no alternative but to close down.

The EU has not given an explicit response to these requests. The EU has expressed willingness to grant transition periods in areas that will require large investments, but only if these exceptions do not interfere with the functioning of a single market. It is unlikely that EU officials will agree to the full range of exceptions requested by the CEE's.

In addition, if the EU were to agree to the CEE proposals to allow lower quality products to be sold on domestic markets, some sort of border controls between the CEE's and the current EU member countries would have to continue. Such controls would be contrary to the idea of a single market.

CEE producers could find themselves considerably worse off if the EU position on the shape of a transition period prevails. The two principal benefits anticipated by CEE producers are higher

## The Double-Zero Agreements

A key initiative undertaken by the EU to prepare candidate countries for accession has been negotiation of a so-called double-zero agreement with each of the 10 candidate CEE's. The core of each agreement is elimination of tariffs and exports subsidies for a wide range of raw agricultural products. By July 2000, the EU had signed agreements with all candidate CEE's except Poland, which signed in September 2000.

The agreements are asymmetric in favor of the CEE's, in that they grant concessions for a higher share of CEE exports to the EU than for EU exports to the CEE's. The EU regards these agreements as an important step towards the ultimate goal of a single market.

The double-zero agreement with Hungary took effect July 1, 2000. It calls for reduced tariffs and an end to export subsidies for 72 percent of Hungary's unprocessed agricultural products and 54 percent of the EU's. The agreement establishes three lists of goods. All tariffs will be abolished for goods on the *first list*—a third of Hungary's agricultural exports to the EU. The *second list* includes pork, poultry, cheese, and wheat. For these goods, tariffs will be abolished for exports up to a given quota, provided exports above the quota are not subsidized. The duty-free quotas are to increase by 10 percent per year. The *third list* of goods will be subject to preferential tariff rates and includes exports of honey, mushrooms, and apple juice from Hungary and exports of cut flowers, tomatoes, apples, and rice from the EU. The elimination of export subsidies could make the export of some products to the EU more difficult. Even so, some Hungarian officials expect this agreement to generate an additional \$1 billion of sales to the EU per year. The agreement does not cover live cattle, beef, dairy products, or wine. For beef and dairy product exports, Hungary will receive a share of a

CEE-wide quota. Wine is covered under a separate agreement.

Negotiations with Poland were dealt a setback by Poland's decision in late 1999 to raise tariffs substantially for wheat, flour, beef, dairy products, and hops imported from the EU. The EU maintained this was a violation of the 1992 Europe Agreement, and the two sides temporarily suspended negotiations. Ultimately, Poland agreed to withdraw these tariff increases but only in exchange for a more favorable double-zero agreement.

According to the new agreement between the EU and Poland, tariffs will be completely removed on 75 percent of food products traded between Poland and the EU, including fruit, vegetables, horse meat, live animals, and mushrooms (the first list.) Pork, beef, poultry, milk, dairy products, and wheat are on the second list, for which the agreement establishes duty-free import quotas, which are to be increased by 10 percent per year. This third list of goods for Poland includes rapeseed and sugar. The EU also agreed to stop all subsidized exports to Poland.

The long-term impact of these agreements is negligible, since they will become void once the CEE's accede to the EU. But in the short term they will bring losses in tariff revenues that could be offset by increased exports of fruit, vegetables, meat, and other products. Both Polish and Hungarian poultry producers expect to benefit during the preaccession period. But in the case of Poland, for the time being, the duty-free pork quota is only theoretical because the EU maintains a ban on imports of Polish pork due to disease problems. And all the CEE's fruit and vegetable exports will continue to be subject to minimum import price requirements, which will continue to exclude all but the very top quality CEE products.

farm prices and access to direct payments currently enjoyed by EU member producers. Direct payments constitute a significant share of farm income in the EU. The 2000/01 payment for grains, for example, was 58.5 euros per ton, equivalent to nearly half the intervention price. It is quite possible that CEE producers would see no rise in revenues while incurring higher costs as they strive to comply with EU regulations. Without direct payments, they would find it very difficult to compete with EU producers whose substantial direct payments offset high production costs. In recognition of this vulnerability, CEE negotiators have refused to consider any sort of delay in eligibility for direct payments.

### Supply Controls—Another Bone of Contention

The EU CAP provides for production quotas for milk, sugar, starch, and dried fodder. Agenda 2000 calls for continuation of these quotas (although the quotas will rise). In addition, direct payments provided to grain and oilseed producers are tied to a so-called base area and reference yield, set at a recent historical average for each region or country. Direct payments for male bovines, suckler cattle, and ewes are subject to national limits on

herd sizes and limits on stocking density (livestock units per hectare.) These supply controls are the subject of intense negotiation between the EU and the CEE's, and the outcome could have important impacts on both post-accession production in the CEE's and their competitive position in an enlarged EU.

The EU is proposing to base all these quotas on 1995-99 average output and yields. Candidate CEE's have requested higher quotas, citing the now familiar argument that output in that period was still well below its potential because of the shocks brought about by the transition from centrally planned economies. For example:

*Milk.* Average 1995-99 output of milk was 11 million tons in Poland and 1.9 in Hungary. Poland is requesting a milk quota of 11.2 million tons in 2003 rising to 13.7 million tons in 2008. Hungary requested a quota of 2.8 million tons.

*Grain.* Hungary requested that 3.6 million hectares of grain be eligible for payments and wants those payments to be made on a yield of 5.2 tons per hectare. In fact, Hungary's grain area during the 1990's ranged from 2.3 to 2.5 million hectares, and average

## Special Article

yield was 4 tons per hectare. Poland likewise requested a reference yield 15 percent higher than the 1986-90 average and a base area equivalent to the 1989-91 average, arguing that this would allow Polish grain output to expand to 30.8 million tons from the current level of 24-26 million tons.

**Beef.** None of the CEE's has a well-developed beef cattle sector. CEE cattle have traditionally been dual-purpose dairy-beef animals. They were raised primarily for dairy products, and beef was considered a byproduct. In addition, cattle numbers throughout Eastern Europe fell by a third to a half during the early years of the post-1989 transition due to a drop in consumer demand for milk. Both Poland and Hungary, eyeing the high beef prices that would come with accession, would like to develop a specialized beef cattle industry. However, EU proposals to use current herd levels as upper limits for beef cattle payments could reduce incentives to expand the beef sector.

### *A New Look at Land, Labor, and Capital*

Production practices in Eastern Europe reflect relative costs of the primary factors of production—land, labor, and capital. Currently, land and labor are relatively cheap, while material inputs (feed, fertilizer, etc.) are very expensive, and capital is both expensive and difficult to obtain. The result is labor-intensive production and yields substantially below those of the EU.

Accession will likely bring substantial capital inflows. A key source of new capital is pre-accession funds pledged by the EU in two programs to aid the CEE's in preparations for accession.

- *Instrument for Structural Policies for Pre-Accession (ISPA)* to support infrastructure projects in transportation and the environment with a budget of 1,040 million euro per year; and
- *Special Accession Program for Agriculture and Rural Development (SAPARD)*, targeted specifically to efforts to support sustainable agricultural and rural development during the pre-accession period. The EU has budgeted 520 million euros annually for the 10 CEE countries.

Both funds carry a 50-percent cofinancing requirement, and CEE governments must demonstrate they have established government structures capable of administering the funds. These requirements have slowed the actual disbursement of funds, but this year funds have begun to flow to the CEE's. Poland, for example is due to receive the first tranche of a 168-million-euro SAPARD package. Of this, 15 percent will be spent on farming projects, 35 percent on food processing, 10 percent on rural projects, and 40 percent on infrastructure. One project to be funded will provide grants of 25,000 euros to hog breeders and dairy farmers to bring their operations into compliance with EU standards.

The other source of new capital is accelerating foreign investment in the region, particularly in CEE food-processing sectors. Food processing is becoming more concentrated as a result, and more plants are being modernized to meet EU standards. These plants are already beginning to invest in primary production, to

ensure a reliable supply of high quality raw product. Potential impacts on land and labor markets are complex.

**Land.** If foreigners are allowed to buy CEE land, then one can expect CEE land prices to rise. Even if foreign land ownership is restricted during a transition period, any rise in producer prices could put upward pressure on land prices. But two factors could limit that upward pressure. First, as pointed out above, prices for field crops may not rise as much as previously assumed. Second, a base yield set at the relatively low level of 1995-99 would limit the income potential of the land.

**Labor.** If labor is fully mobile throughout the enlarged EU, one would expect some convergence of CEE and EU wages. Higher wages could also result in the CEE's if the expected inflows of investment generate an increase in the demand for labor. However, labor mobility is a hotly contested issue in the negotiations. Several of the less wealthy EU members, fearing an out-migration of CEE workers, are insisting on a transition period before allowing full movement of CEE workers.

Another issue affecting wage developments is the relative skill levels of EU and CEE workers. A number of recent studies have pointed to a widening skills gap between CEE and EU workers and criticized the CEE's for insufficient investment in human resources. Poland is considered to be more of a problem in this regard than Hungary or the Czech Republic. One study estimates that Polish labor productivity is five times under the EU average and warns that unemployment could rise significantly after accession. Any rise in investment will lead to greater demand for skilled labor and a decline in demand for less skilled workers.

### *Is There a Silver Lining?*

The outcome of discussions of direct payments and supply controls could have a profound impact on the size and structure of CEE agriculture after accession. Without further restructuring, the agricultural sectors in the CEE's, particularly Poland, could shrink after accession.

On the other hand, the probable delays in accession will give more time to CEE producers and processors to carry out needed restructuring and prepare to compete in a single market. This process will be aided by expected capital inflows from foreign investors and EU pre-accession funds.

The result could be that despite the costs associated with accession, CEE agricultural output will remain stable or even rise. However, the structure of the sector could change profoundly. Structural changes could be most dramatic in Poland. The Communists failed in repeated attempts to collectivize Polish agriculture, with the result that Poland is the only CEE beginning its transition with an agricultural sector dominated by small private farms. Ironically, preparations for EU accession could do more to force changes in Polish agriculture than the Communists were able to do in 40 years. **AO**

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# Statistical Indicators

## Summary Data

**Table 1—Key Statistical Indicators of the Food & Fiber Sector**

	1999			2000				2001		
	1999	2000	2001	IV	I	II	III	IV	I	II
Prices received by farmers (1990-92=100)	95	--	--	92	92	101	98	--	--	--
Livestock & products	95	--	--	96	95	100	98	--	--	--
Crops	96	--	--	89	91	102	98	--	--	--
Prices paid by farmers (1990-92=100)										
Production items	111	--	--	112	115	116	116	--	--	--
Commodities and services, interest, taxes, and wage rates (PPITW)	115	--	--	116	119	119	119	--	--	--
Cash receipts (\$ bil.)	189	195	--	59	46	44	47	57	--	--
Livestock	95	100	--	24	25	25	25	25	--	--
Crops	93	94	--	34	21	19	22	32	--	--
Market basket (1982-84=100)										
Retail cost	167	--	--	169	169	169	172	--	--	--
Farm value	98	--	--	97	95	96	97	--	--	--
Spread	205	--	--	207	209	209	211	--	--	--
Farm value/retail cost (%)	21	--	--	20	20	20	20	--	--	--
Retail prices (1982-84=100)										
All food	164	168	171	165	166	167	169	169	170	171
At home	164	168	171	165	166	167	169	169	170	170
Away from home	165	169	173	167	168	168	170	171	172	172
Agricultural exports (\$ bil.) <sup>1</sup>	49.2	50.9	53.0	13.7	13.1	12.0	12.2	14.0	14.1	12.6
Agricultural imports (\$ bil.) <sup>1</sup>	37.3	38.9	40.0	9.6	10.1	10.2	9.1	9.2	10.1	10.0
Commercial production										
Red meat (mil. lb.)	46,134	46,153	--	11,756	11,595	11,279	11,618	11,661	11,436	11,179
Poultry (mil. lb.)	35,590	36,304	--	8,894	9,019	9,286	8,969	9,030	9,265	9,570
Eggs (mil. doz.)	6,912	7,028	--	1,786	1,754	1,744	1,750	1,780	1,760	1,750
Milk (bil. lb.)	162.7	168.4	--	40.4	42.6	43.2	41.3	41.3	43.0	43.8
Consumption, per capita										
Red meat and poultry (lb.)	220.3	219.6	--	55.9	53.9	54.9	54.8	56.0	54.5	54.7
Corn beginning stocks (mil. bu.) <sup>2</sup>	1,307.8	1,787.0	1,715.2	3,616.2	1,787.0	8,024.7	5,602.0	3,585.9	1,715.2	--
Corn use (mil. bu.) <sup>2</sup>	9,298.3	9,523.9	10,025.0	1,831.1	3,203.2	2,426.1	2,021.5	1,873.0	--	--
Prices <sup>3</sup>										
Choice steers--Neb. Direct (\$/cwt)	65.56	69.21	--	69.65	69.32	71.59	65.43	70-71	69-73	72-78
Barrows and gilts--IA, So. MN (\$/cwt)	34.00	44.38	--	36.29	41.14	50.43	46.43	39-40	42-44	43-47
Broilers--12-city (cents/lb.)	58.10	56.20	--	57.60	54.60	55.70	56.80	57-58	53-55	53-57
Eggs--NY gr. A large (cents/doz.)	65.60	67.50	--	63.20	63.30	62.10	67.10	77-78	63-67	58-62
Milk--all at plant (\$/cwt)	14.36	12.25-	--	13.83	11.90	12.03	12.70	12.45-	12.50-	11.65-
		12.35						12.65	13.00	12.45
Wheat--KC HRW ordinary (\$/bu.)	2.92	3.04	--	2.83	2.92	2.95	3.00	--	--	--
Corn--Chicago (\$/bu.)	2.01	1.97	--	1.91	2.12	2.16	1.64	--	--	--
Soybeans--Chicago (\$/bu.)	4.61	--	--	4.53	4.95	5.20	4.60	--	--	--
Cotton--avg. spot 41-34 (cents/lb)	52.31	--	--	48.08	54.63	55.68	58.36	--	--	--
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Farm real estate values <sup>4</sup>										
Nominal (\$ per acre)	703	713	740	798	844	887	926	974	1,020	1,050
Real (1982 \$)	521	507	514	540	558	572	586	606	627	636
U.S. civilian employment (mil.) <sup>5</sup>	126.3	128.1	129.2	131.1	132.3	133.9	136.3	137.7	139.4	--
Food and fiber (mil.)	23.7	23.1	23.6	24.2	24.5	24.2	24.1	24.0	24.3	--
Farm sector (mil.)	2.0	1.9	1.8	1.9	2.0	2.0	1.9	1.8	1.7	--
U.S. gross domestic product (\$ bil.)	5,986.2	6,318.9	6,642.3	7,054.3	7,400.5	7,813.2	8,318.4	8,790.2	9,299.2	--
Food and fiber--net value added (\$ bil.)	877.5	924.8	965.7	1,066.2	1,126.5	1,210.4	1,317.1	1,446.4	1,521.4	--
Farm sector--net value added (\$ bil.) <sup>6</sup>	71.1	75.5	73.1	78.3	75.3	86.7	83.5	74.8	69.8	--

-- = Not available. Annual and quarterly data for the most recent year contain forecasts. 1. Annual data based on Oct.-Sept. fiscal years ending with year indicated. 2. Sept.-Nov. first quarter; Dec.-Feb. second quarter; Mar.-May third quarter; Jun.-Aug. fourth quarter; Sept.-Aug. annual. Use includes exports and domestic disappearance. 3. Simple averages, Jan.-Dec. 4. As of January 1. 5. Civilian labor force taken from "Monthly Labor Review," Table 18--Annual Data: Employment Status of the Population, Bureau of Labor Statistics, U.S. Department of Labor. 6. The value-added data presented here is consistent with accounting conventions of the National Income and Product Accounts, U.S. Department of Commerce.

## U.S. & Foreign Economic Data

### Table 2—U.S. Gross Domestic Product & Related Data

				1999				2000		
	1997	1998	1999	I	II	III	IV	I	II	III
<i>Billions of current dollars (quarterly data seasonally adjusted at annual rates)</i>										
Gross Domestic Product	8,318.4	8,790.2	9,299.2	9,104.5	9,191.5	9,340.9	9,559.7	9,752.7	9,945.7	10,052.2
Gross National Product	8,305.0	8,750.0	9,236.2	9,097.2	9,181.8	9,327.3	9,546.3	9,745.0	9,937.4	10,040.0
Personal consumption expenditures	5,529.3	5,850.9	6,268.7	6,095.3	6,213.2	6,319.9	6,446.2	6,621.7	6,706.3	6,816.7
Durable goods	642.5	693.9	761.3	733.9	756.3	767.2	787.6	826.3	814.3	825.5
Nondurable goods	1,641.6	1,707.6	1,845.5	1,786.4	1,825.3	1,860.0	1,910.2	1,963.9	1,997.6	2,032.0
Food	812.2	845.8	897.8	878.1	886.6	900.4	926.1	938.4	948.3	960.0
Clothing and shoes	271.7	286.4	307.0	301.1	306.1	308.7	311.9	323.1	325.6	331.1
Services	3,245.2	3,449.3	3,661.9	3,575.0	3,631.5	3,692.7	3,748.5	3,831.6	3,894.4	3,959.2
Gross private domestic investment	1,390.5	1,549.9	1,650.1	1,609.8	1,607.9	1,659.1	1,723.7	1,755.7	1,852.6	1,872.4
Fixed investment	1,327.7	1,472.9	1,606.8	1,560.6	1,593.4	1,622.4	1,651.0	1,725.8	1,780.5	1,805.0
Change in private inventories	62.9	77.0	43.3	49.2	14.5	36.7	72.7	29.9	72.0	67.4
Net exports of goods and services	-89.3	-151.5	-254.0	-196.1	-240.4	-280.5	-299.1	-335.2	-355.4	-386.1
Government consumption expenditures and gross investment	1,487.9	1,540.9	1,634.4	1,595.5	1,610.9	1,642.4	1,688.8	1,710.4	1,742.2	1,749.2
<i>Billions of 1996 dollars (quarterly data seasonally adjusted at annual rates)<sup>1</sup></i>										
Gross Domestic Product	8,159.5	8,515.7	8,875.8	8,730.0	8,783.2	8,905.8	9,084.1	9,191.8	9,318.9	9,373.5
Gross National Product	8,168.1	8,515.1	8,868.3	8,726.0	8,776.7	8,895.4	9,075.0	9,187.7	9,313.7	9,364.5
Personal consumption expenditures	5,423.9	5,678.7	5,978.8	5,860.2	5,940.2	6,013.8	6,101.0	6,213.5	6,260.6	6,330.5
Durable goods	657.3	727.3	817.8	782.7	810.5	826.2	851.8	898.2	886.7	904.1
Nondurable goods	1,619.9	1,684.8	1,779.4	1,748.5	1,765.0	1,786.1	1,818.1	1,844.8	1,861.1	1,883.1
Food	794.5	812.8	845.9	832.7	838.0	846.7	866.0	872.2	876.5	879.2
Clothing and shoes	271.6	292.2	318.5	313.3	316.5	322.1	322.1	337.7	342.3	350.4
Services	3,147.0	3,269.4	3,390.8	3,335.8	3,373.4	3,411.1	3,443.0	3,487.2	3,526.7	3,558.7
Gross private domestic investment	1,393.3	1,566.8	1,669.7	1,623.2	1,623.1	1,680.8	1,751.6	1,773.6	1,863.0	1,872.8
Fixed investment	1,328.6	1,485.3	1,621.4	1,574.0	1,607.1	1,637.8	1,666.6	1,730.9	1,777.6	1,791.9
Change in private inventories	63.8	80.2	45.3	48.1	13.1	39.1	80.9	36.6	78.6	73.5
Net exports of goods and services	-113.3	-221.0	-322.4	-279.8	-314.6	-342.6	-352.5	-376.8	-403.4	-425.0
Government consumption expenditures and gross investment	1,455.4	1,486.4	1,536.1	1,517.1	1,519.9	1,537.8	1,569.5	1,565.1	1,583.7	1,577.7
GDP implicit price deflator (% change)	1.9	1.3	1.5	2.3	1.4	0.9	1.3	3.3	2.4	1.9
Disposable personal income (\$ bil.)	5,968.2	6,320.0	6,637.7	6,514.9	6,596.3	6,664.0	6,775.0	6,866.5	6,964.9	7,042.9
Disposable pers. income (1996 \$ bil.)	5,854.5	6,134.1	6,331.0	6,263.7	6,306.6	6,341.7	6,412.2	6,443.1	6,502.0	6,540.6
Per capita disposable pers. income (\$)	22,262	23,359	24,314	23,946	24,196	24,384	24,728	25,014	25,322	25,542
Per capita disp. pers. income (1996 \$)	21,838	22,672	23,191	23,022	23,133	23,203	23,404	23,472	23,639	23,720
U.S. resident population plus Armed Forces overseas (mil.) <sup>2</sup>	268.0	270.5	272.9	272.0	272.5	273.2	273.9	274.4	275.0	275.6
Civilian population (mil.) <sup>2</sup>	266.5	269.0	271.5	270.5	271.1	271.7	272.4	273.0	273.5	274.2
<i>Monthly data seasonally adjusted</i>										
Annual										
	1997	1998	1999	1999			2000			
				Oct	May	Jun	Jul	Aug	Sep	Oct
<i>Monthly data seasonally adjusted</i>										
Total industrial production (1992=100)	130.1	136.4	142.3	144.2	150.3	151.0	151.1	151.7	152.4	152.3
Leading economic indicators (1992=100)	103.9	105.5	105.2	105.5	106.0	106.0	105.8	105.7	105.7	105.5
Civilian employment (mil. persons) <sup>3</sup>	129.6	131.5	133.5	133.9	134.7	135.2	134.7	134.9	135.2	135.4
Civilian unemployment rate (%) <sup>3</sup>	4.9	4.5	4.2	4.1	4.1	4.0	4.0	4.1	3.9	3.9
Personal income (\$ bil. annual rate)	6,937.0	7,391.0	7,789.6	7,945.7	8,237.6	8,279.5	8,301.6	8,330.2	8,421.4	8,404.9
Money stock-M2 (daily avg.) (\$ bil.) <sup>4</sup>	4,040.2	4,395.0	4,659.8	4,608.8	4,776.3	4,791.4	4,806.2	4,836.2	4,871.5	4,889.8
Three-month Treasury bill rate (%)	5.07	4.81	4.66	4.88	5.92	5.74	5.93	6.11	6.00	6.10
AAA corporate bond yield (Moody's) (%)	7.26	6.53	7.04	7.55	7.99	7.67	7.65	7.55	7.62	7.55
Total housing starts (1,000) <sup>5</sup>	1,474.0	1,616.9	1,666.5	1,636	1,591	1,571	1,527	1,519	1,530	1,532
Business inventory/sales ratio <sup>6</sup>	1.38	1.39	1.35	1.33	1.32	1.32	1.33	1.34	1.33	--
Sales of all retail stores (\$ bil.) <sup>7</sup>	2,610.6	2,745.6	2,994.9	254.9	267.4	268.4	270.6	207.6	272.7	272.8
Nondurable goods stores (\$ bil.)	1,547.3	1,609.2	1,739.9	148.1	156.6	157.7	158.9	159.3	160.5	161.3
Food stores (\$ bil.)	423.7	435.4	458.3	38.5	40.1	40.4	40.4	40.4	40.6	40.8
Apparel and accessory stores (\$ bil.)	119.6	127.0	135.1	11.3	11.8	11.7	11.7	11.9	12.1	12.1
Eating and drinking places (\$ bil.)	254.1	266.4	285.4	24.4	25.3	25.4	25.7	25.5	25.8	25.8

-- = Not available. 1. In October 1999, 1996 dollars replaced 1992 dollars. 2. Population estimates based on 1990 census. 3. Data beginning January 1994 are not directly comparable with data for earlier periods because of a major redesign of the household survey questionnaire. 4. Annual data as of December of year listed. 5. Private, including farm. 6. Manufacturing and trade. 7. Annual total. *Information contact: David Johnson (202) 694-5324*

**Table 3—World Economic Growth**

	Calendar year									
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
	<i>Real GDP, annual percent change</i>									
<b>World</b>	1.8	1.5	3.0	2.7	3.2	3.4	2.1	2.8	4.1	3.3
less U.S.	1.4	1.1	2.7	2.7	3.0	3.1	1.3	2.3	3.8	3.3
<b>Developed economies</b>	1.6	0.9	2.8	2.3	2.7	3.1	2.4	2.7	3.7	2.7
less U.S.	1.0	0.1	2.3	2.1	2.2	2.4	1.5	2.0	3.0	2.5
United States	3.1	2.7	4.0	2.7	3.6	4.4	4.4	4.2	5.1	3.1
Canada	0.9	2.3	4.7	2.8	1.5	4.4	3.3	4.5	5.0	3.3
Japan	0.9	0.5	1.0	1.6	3.3	1.9	-1.1	0.8	2.0	1.5
Australia	2.3	3.7	5.2	3.8	4.1	4.0	5.3	4.7	4.5	3.3
European Union	1.1	-0.4	2.7	2.4	1.6	2.5	2.7	2.4	3.3	3.0
<b>Transition economies</b>	-10.2	-6.6	-8.9	-1.5	-1.0	1.1	-1.5	2.3	5.3	3.4
Eastern Europe	-0.6	1.0	2.9	5.7	4.2	2.4	1.8	2.1	4.1	3.9
Poland	2.6	3.8	5.2	7.0	6.1	6.9	4.8	4.0	5.0	4.5
Former Soviet Union	-13.8	-10.0	-14.8	-5.9	-4.5	0.2	-4.0	2.5	6.3	3.0
Russia	-14.5	-8.7	-12.6	-4.1	-3.5	0.8	-4.6	3.2	7.0	3.1
<b>Developing economies</b>	5.3	5.8	6.3	5.2	5.8	5.4	1.2	3.3	5.8	5.4
<b>Asia</b>	7.7	8.0	8.8	8.3	7.5	6.0	0.4	6.2	7.4	6.4
East Asia	9.4	9.2	9.7	8.8	7.8	7.0	2.0	7.5	8.4	6.8
China	14.2	13.5	12.6	10.5	9.6	8.8	7.8	7.1	8.3	8.5
Taiwan	7.5	7.0	7.1	6.4	6.1	6.7	4.6	5.4	6.4	4.6
Korea	5.4	5.5	8.2	8.9	6.7	5.0	-6.7	10.7	9.3	5.1
Southeast Asia	5.6	7.7	7.9	8.1	7.1	4.7	-6.1	3.5	5.8	5.2
Indonesia	7.2	7.3	7.5	8.2	7.8	4.7	-13.2	0.7	4.7	6.0
Malaysia	7.8	8.3	9.2	9.5	8.6	7.8	-7.4	5.6	8.6	5.9
Philippines	0.3	2.1	4.4	4.7	5.8	5.2	-0.5	3.2	3.7	1.8
Thailand	8.1	8.4	8.9	8.8	5.5	-0.4	-10.2	4.2	5.5	5.9
South Asia	5.7	4.5	7.1	6.9	7.0	4.9	5.3	5.6	6.0	6.5
India	5.4	5.0	8.1	7.4	7.7	5.7	5.6	6.3	6.4	7.0
Pakistan	7.8	1.9	3.9	5.1	4.7	-0.4	3.7	3.0	4.0	4.5
<b>Latin America</b>	3.4	4.3	5.3	1.3	3.6	5.1	1.9	0.0	4.0	4.3
Mexico	3.6	1.9	4.5	-6.2	5.1	6.8	4.8	3.7	7.3	5.7
Caribbean/Central	8.0	4.7	4.0	3.2	3.6	5.8	6.1	3.3	4.0	4.7
South America	3.3	4.9	5.6	3.1	3.3	4.8	1.2	-1.0	3.2	4.0
Argentina	11.9	5.9	5.8	-2.8	5.5	8.1	3.9	-3.1	0.4	1.0
Brazil	-0.5	4.9	5.9	4.2	2.8	3.2	0.1	0.8	4.1	4.8
Colombia	3.9	5.4	5.8	5.2	2.0	2.8	0.6	-4.5	3.3	4.8
Venezuela	6.1	0.3	-2.3	3.7	-0.5	6.5	-0.7	-7.3	2.6	3.1
<b>Middle East</b>	4.7	3.9	-0.2	3.7	4.5	4.7	2.4	-1.4	4.5	4.0
Israel	5.6	5.6	6.9	7.0	4.6	2.2	1.9	2.1	4.8	3.8
Saudi Arabia	2.8	-0.6	0.5	0.5	1.4	1.9	2.3	-1.1	3.5	3.0
Turkey	6.4	8.7	-5.2	7.8	7.5	7.5	3.5	-5.1	6.2	5.3
<b>Africa</b>	0.2	1.0	3.2	2.9	5.2	2.8	3.1	2.9	3.7	4.1
North Africa	2.0	0.5	3.9	1.5	6.5	2.6	5.6	3.8	4.3	4.7
Egypt	4.4	2.9	3.9	4.7	5.0	5.5	5.6	6.0	5.0	4.6
Sub-Saharan	-1.1	1.4	2.6	3.9	4.3	2.9	1.3	2.2	3.2	3.6
South Africa	-2.1	1.2	3.2	3.1	4.2	2.5	0.5	1.9	3.0	3.3
	<i>Consumer Prices, annual percent change</i>									
Developed Economies	3.5	3.1	2.6	2.6	2.4	2.1	1.5	1.4	2.3	2.1
Transition Economies	788.9	634.4	274.1	133.5	42.4	27.3	21.8	43.8	18.3	12.5
Developing Economies	42.8	48.7	54.7	23.2	15.3	9.7	10.1	6.6	6.2	5.2
Asia	8.6	10.8	16.0	13.2	8.3	4.7	7.5	2.4	2.4	3.3
Latin America	150.3	194.6	200.3	36.0	21.6	13.4	10.2	9.3	8.9	7.0
Middle East	26.5	26.6	33.2	39.2	26.9	25.4	25.3	20.4	17.4	9.5
Africa	47.1	39.0	54.8	35.2	30.2	13.6	9.1	11.8	12.7	8.6

-- = Not available. The last 3 years are either estimates or forecasts. Sources: Oxford Economic Forecasting; International Financial Statistics, IMF.  
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## Farm Prices

**Table 4—Indexes of Prices Received & Paid by Farmers, U.S. Average**

	Annual		1999		2000					
	1997	1998	1999	Nov	Jun	Jul	Aug	Sep	Oct	Nov
	<i>1990-92=100</i>									
<b>Prices received</b>										
All farm products	107	101	95	93	99	98	98	98	93	97
All crops	115	106	96	89	99	96	99	98	91	96
Food grains	128	103	91	89	84	78	81	82	88	89
Feed grains and hay	117	100	86	77	90	82	79	78	80	84
Cotton	112	107	85	73	77	81	85	83	92	96
Tobacco	104	104	102	105	--	--	97	105	104	102
Oil-bearing crops	131	107	83	82	88	81	79	84	81	84
Fruit and nuts, all	109	111	114	115	114	123	129	124	120	107
Commercial vegetables	118	121	108	99	117	118	127	142	124	141
Potatoes and dry beans	90	99	100	94	106	114	95	81	76	79
Livestock and products	98	97	95	98	100	100	97	98	96	99
Meat animals	92	79	83	87	97	96	92	90	92	92
Dairy products	102	119	110	110	93	97	96	98	96	93
Poultry and eggs	113	117	111	116	112	112	110	116	107	119
<b>Prices paid</b>										
Commodities and services,										
interest, taxes, and wage rates (PPITW)	118	115	115	116	120	120	119	120	121	121
Production items	119	113	111	112	116	116	115	116	117	118
Feed	125	110	100	97	104	100	95	98	100	102
Livestock and poultry	94	88	95	105	108	111	107	105	111	112
Seeds	119	122	121	121	124	124	124	124	124	124
Fertilizer	121	112	105	103	108	112	112	113	115	117
Agricultural chemicals	121	122	121	119	121	121	121	120	120	120
Fuels	106	84	93	112	132	130	132	153	152	153
Supplies and repairs	118	119	121	122	124	124	124	124	124	124
Autos and trucks	119	119	119	120	119	119	118	118	118	118
Farm machinery	128	132	135	137	139	139	139	137	137	137
Building material	118	118	120	120	121	121	121	121	121	121
Farm services	116	115	116	115	117	118	118	119	119	118
Rent	136	120	113	113	117	117	117	113	113	113
Interest payable per acre on farm real estate debt	105	104	106	106	110	110	110	110	110	110
Taxes payable per acre on farm real estate	115	119	120	120	123	123	123	123	123	123
Wage rates (seasonally adjusted)	123	129	135	135	140	136	136	136	143	143
Prod. items, interest, taxes & wage rates (PITW)	118	114	113	114	118	118	117	118	119	120
Ratio, prices received to prices paid (%)*	90	88	83	80	83	82	82	82	77	80
Prices received (1910-14=100)	678	643	607	592	632	623	623	623	591	619
Prices paid, etc. (parity index) (1910-14=100)	1,574	1,532	1,531	1,546	1,598	1,594	1,584	1,592	1,609	1,614
Parity ratio (1910-14=100) (%)*	43	42	40	38	40	39	39	39	37	38

-- = Not available. Values for the two most recent months are revised or preliminary. \*Ratio of index of prices received for all farm products to index of prices paid for commodities and services, interest, taxes, and wage rates. Ratio uses the most recent prices paid index. Data for this table are taken from the publication *Agricultural Prices*, which is produced monthly by USDA's National Agricultural Statistics Service (NASS) and is available at <http://usda.mannlib.cornell.edu/reports/nassr/price/pap-bb/>. For historical data or for categories not listed here, call the National Agricultural Statistics Service (NASS) Information Hotline at 1-800-727-9540, or access the NASS Home Page at <http://www.usda.gov/nass>.

**Table 5—Prices Received by Farmers, U.S. Average**

	Annual <sup>1</sup>		1999			2000				
	1997	1998	1999	Nov	Jun	Jul	Aug	Sep	Oct	Nov
<b>Crops</b>										
All wheat (\$/bu.)	3.38	2.65	2.55	2.66	2.50	2.32	2.41	2.44	2.68	2.72
Rice, rough (\$/cwt)	9.70	8.89	6.00	6.11	5.59	5.47	5.60	5.72	5.61	5.64
Corn (\$/bu.)	2.43	1.94	1.90	1.70	1.91	1.64	1.53	1.61	1.74	1.83
Sorghum (\$/cwt)	3.95	2.97	2.95	2.57	3.32	2.81	2.73	2.77	3.01	3.28
All hay, baled (\$/ton)	100.00	84.60	77.00	74.70	82.50	80.20	80.50	82.70	85.20	85.00
Soybeans (\$/bu.)	6.47	4.93	4.75	4.45	4.92	4.53	4.45	4.57	4.45	4.51
Cotton, upland (¢/lb.)	65.20	60.20	44.90	44.30	46.40	49.10	51.30	50.60	55.90	58.20
Potatoes (\$/cwt)	5.62	5.56	5.84	5.52	6.47	7.12	5.77	4.69	4.33	4.53
Lettuce (\$/cwt) <sup>2</sup>	17.50	16.10	13.30	11.20	13.40	15.00	19.20	29.40	16.10	18.00
Tomatoes, fresh (\$/cwt) <sup>2</sup>	31.70	35.20	25.90	25.90	24.70	23.50	30.70	27.80	42.60	48.50
Onions (\$/cwt)	12.60	13.80	9.78	8.82	14.80	17.40	14.60	11.70	11.00	10.80
Beans, dry edible (\$/cwt)	19.30	19.00	17.60	17.20	15.70	15.10	13.90	15.60	15.60	16.00
Apples for fresh use (¢/lb.)	22.10	17.30	21.20	22.90	16.10	16.20	19.50	23.30	21.80	18.50
Pears for fresh use (\$/ton)	276.00	291.00	294.00	501.00	220.00	270.00	280.00	317.00	377.00	378.00
Oranges, all uses (\$/box) <sup>3</sup>	4.22	4.29	5.94	4.29	4.43	3.07	2.17	9.30	1.09	3.16
Grapefruit, all uses (\$/box) <sup>3</sup>	1.93	2.00	3.22	5.10	5.27	6.14	4.45	6.71	5.17	3.09
<b>Livestock</b>										
Cattle, all beef (\$/cwt)	63.10	59.60	63.40	66.20	68.50	67.50	65.50	65.30	66.70	69.50
Calves (\$/cwt)	78.90	78.80	87.70	93.00	104.00	106.00	106.00	103.00	102.00	106.00
Hogs, all (\$/cwt)	52.90	34.40	30.30	33.40	48.60	48.50	43.80	41.50	41.40	35.90
Lambs (\$/cwt)	90.30	72.30	74.50	76.30	89.70	87.00	83.60	80.80	76.80	--
All milk, sold to plants (\$/cwt)	13.36	15.46	14.38	14.40	12.20	12.70	12.60	12.80	12.50	12.20
Milk, manuf. grade (\$/cwt)	12.17	14.24	12.86	11.10	10.30	10.70	10.70	11.20	10.80	10.10
Broilers, live (¢/lb.)	37.70	39.30	37.10	38.00	37.00	37.50	35.00	39.00	33.00	38.00
Eggs, all (¢/doz.) <sup>4</sup>	70.30	66.80	62.70	66.00	62.90	57.20	68.10	60.30	68.50	74.00
Turkeys (¢/lb.)	39.90	38.00	40.80	45.30	41.60	41.90	42.90	44.50	45.90	47.00

-- = Not available. Values for the two most recent months are revised or preliminary. 1. Season-average price by crop year for crops. Calendar year average of monthly prices for livestock. 2. Excludes Hawaii. 3. Equivalent on-tree returns. 4. Average of all eggs sold by producers including hatching eggs and eggs sold at retail. Data for this table are taken from the publication *Agricultural Prices*, which is produced monthly by USDA's National Agricultural Statistics Service (NASS) and is available at <http://usda.mannlib.cornell.edu/reports/nassr/price/pap-bb/>. For historical data or for categories not listed here, call the National Agricultural Statistics Service (NASS) Information Hotline at 1-800-727-9540, or access the NASS Home Page at <http://www.usda.gov/nass>.

## Producer & Consumer Prices

**Table 6—Consumer Price Indexes for All Urban Consumers, U.S. Average (not seasonally adjusted)**

	Annual		1999			2000				
	1997	1998	1999	Nov	Jun	Jul	Aug	Sep	Oct	Nov
	<i>1982-84=100</i>									
Consumer Price Index, all items	160.5	163.0	166.6	168.3	172.3	172.6	172.8	173.7	174.0	174.1
CPI, all items less food	161.1	163.6	167.0	168.8	173.2	173.5	173.5	174.6	174.9	175.0
All food	157.3	160.7	164.1	165.2	167.3	168.1	168.7	168.9	169.1	168.9
Food away from home	157.0	161.1	165.1	166.5	168.6	169.1	169.5	170.0	170.3	170.4
Food at home	158.1	161.1	164.2	165.1	167.3	168.3	168.9	169.0	169.1	168.8
Meats <sup>1</sup>	144.4	141.6	142.3	145.3	151.7	152.7	153.9	153.8	152.9	152.5
Beef and veal	136.8	136.5	139.2	142.2	149.4	149.5	150.4	150.2	148.9	149.3
Pork	155.9	148.5	145.9	149.3	157.5	159.9	162.1	161.4	160.7	158.0
Poultry	156.6	157.1	157.9	159.4	159.3	161.8	161.3	160.9	162.1	157.2
Fish and seafood	177.1	181.7	185.3	187.9	191.9	189.7	190.7	191.9	192.8	189.6
Eggs	140.0	135.4	128.1	128.8	125.9	125.5	130.5	132.0	136.1	140.4
Dairy and related products <sup>2</sup>	145.5	150.8	159.6	164.6	159.5	160.5	161.0	161.6	161.9	161.4
Fats and oils <sup>3</sup>	141.7	146.9	148.3	145.3	146.6	148.1	148.9	148.7	149.7	146.5
Fresh fruits	236.3	246.5	266.3	260.5	244.6	248.9	252.2	258.2	262.6	262.8
Fresh vegetables	194.6	215.8	209.3	209.1	217.7	216.7	217.3	218.9	218.6	224.6
Potatoes	174.2	185.2	193.1	186.1	201.7	208.3	210.7	195.4	191.5	181.2
Cereals and bakery products	177.6	181.1	185.0	184.8	187.7	189.6	189.9	188.6	190.1	189.0
Sugar and sweets	147.8	150.2	152.3	152.1	154.0	154.1	154.6	154.6	153.9	153.0
Nonalcoholic beverages <sup>4</sup>	133.4	133.0	134.3	133.9	137.5	138.5	138.2	138.0	137.4	137.9
Apparel										
Footwear	127.6	128.0	125.7	126.4	123.9	120.3	120.7	124.9	125.3	125.4
Tobacco and smoking products	243.7	274.8	355.8	369.8	388.5	400.7	394.1	408.0	396.7	411.0
Alcoholic beverages	162.8	165.7	169.7	171.2	174.4	175.2	175.6	175.5	175.9	176.4

1. Beef, veal, lamb, pork, and processed meat. 2. Included butter through December '97. 3. Includes butter as of January '98. 4. Includes fruit juices as of January 1998. This table is compiled with data provided by the Bureau of Labor Statistics (BLS). BLS operates a website at <http://stats.bls.gov/bls/home.html> and a Consumer Prices Information Hotline at (202) 606-7828.

**Table 7—Producer Price Indexes, U.S. Average (not seasonally adjusted)**

	Annual		1999			2000				
	1997	1998	1999	Nov	Jun	Jul	Aug	Sep	Oct	Nov
	<i>1982=100</i>									
All commodities	127.6	124.4	125.5	128.3	133.8	133.7	132.9	134.5	135.1	134.6
Finished goods <sup>1</sup>	131.8	130.6	133.0	134.9	138.6	138.6	138.1	139.2	140.0	139.9
All foods <sup>2</sup>	132.8	132.4	132.2	132.2	133.5	133.3	132.5	132.8	133.6	133.7
Consumer foods	134.5	134.3	135.1	135.4	137.6	137.5	136.9	137.1	137.8	138.1
Fresh fruits and melons	99.4	90.0	103.6	94.9	84.9	84.6	71.1	90.6	93.8	90.7
Fresh and dry vegetables	123.1	139.5	118.0	108.8	120.9	119.7	128.1	137.3	143.9	149.7
Dried and dehydrated fruits	124.9	124.4	121.2	119.5	122.6	122.5	122.6	122.6	130.3	125.3
Canned fruits and juices	137.6	134.4	137.8	138.0	140.4	139.9	139.8	140.0	140.4	140.2
Frozen fruits, juices and ades	117.2	116.1	123.0	123.7	122.4	121.5	120.7	118.1	118.1	116.3
Fresh veg. except potatoes	121.3	137.9	117.7	100.9	128.1	127.2	136.8	154.9	165.0	174.5
Canned vegetables and juices	120.1	121.5	120.9	121.3	121.5	121.1	120.5	120.7	121.1	121.7
Frozen vegetables	125.8	125.4	126.1	125.5	124.9	125.9	126.4	126.4	126.6	125.8
Potatoes	106.1	122.5	126.9	110.8	94.4	112.8	125.3	97.7	92.9	92.3
Eggs for fresh use (1991=100)	97.1	90.1	77.9	85.8	81.9	70.3	91.1	77.7	90.7	99.7
Bakery products	173.9	175.8	178.0	179.0	182.3	182.5	182.5	183.3	184.1	185.0
Meats	111.6	101.4	104.6	106.5	119.5	118.6	114.9	111.1	111.6	112.1
Beef and veal	102.8	99.5	106.3	109.0	118.6	115.7	111.9	109.4	111.4	114.5
Pork	123.1	96.6	96.0	96.9	121.3	123.4	116.9	109.1	108.6	105.0
Processed poultry	117.4	120.7	114.0	114.1	111.8	111.8	113.3	117.9	117.2	116.8
Unprocessed and packaged fish	178.1	183.0	190.9	198.9	195.0	196.8	200.9	189.7	194.1	189.6
Dairy products	128.1	138.1	139.2	141.3	134.0	135.8	134.9	135.6	134.6	135.6
Processed fruits and vegetables	126.4	125.8	128.1	128.3	128.9	128.7	127.9	127.6	128.2	127.7
Shortening and cooking oil	137.8	143.4	140.4	135.2	132.0	131.1	130.5	132.1	130.8	133.1
Soft drinks	133.2	134.8	137.9	139.4	144.6	144.7	144.8	144.0	144.3	144.7
Finished consumer goods less foods	128.2	126.4	130.5	133.6	139.6	139.5	139.0	140.8	141.5	141.2
Alcoholic beverages	135.1	135.2	136.7	136.7	141.2	141.2	137.6	141.4	142.3	141.7
Apparel	125.7	126.6	127.1	126.9	127.3	127.6	126.7	126.8	127.1	127.2
Footwear	143.7	144.7	144.5	144.6	144.8	145.0	145.1	145.1	145.1	145.1
Tobacco products	248.9	283.4	374.0	394.7	393.2	393.4	402.4	402.5	403.8	403.9
Intermediate materials <sup>3</sup>	125.6	123.0	123.2	125.2	129.8	130.3	129.9	131.0	130.8	130.5
Materials for food manufacturing	123.2	123.1	120.8	120.9	120.6	120.5	119.1	118.9	119.1	118.8
Flour	118.7	109.2	104.3	103.9	104.2	102.7	103.1	103.6	108.6	107.2
Refined sugar <sup>4</sup>	123.6	119.8	121.0	119.1	111.2	111.4	109.7	104.3	105.0	106.0
Crude vegetable oils	116.6	131.1	90.2	78.9	75.6	72.7	67.0	74.3	71.7	65.9
Crude materials <sup>5</sup>	111.1	96.7	98.2	109.2	125.6	122.7	119.2	124.8	128.3	125.5
Foodstuffs and feedstuffs	112.2	103.8	98.7	99.5	101.9	99.3	95.4	97.6	99.5	100.5
Fruits and vegetables and nuts <sup>6</sup>	115.5	117.2	117.4	105.9	104.8	104.1	99.6	114.6	120.5	120.3
Grains	111.2	93.4	80.1	77.2	78.6	71.0	66.8	70.2	76.3	81.2
Slaughter livestock	96.3	82.3	86.4	89.6	100.4	97.9	92.8	91.1	93.1	94.3
Slaughter poultry, live	131.0	141.4	129.9	137.7	124.2	126.5	119.6	133.6	130.8	134.7
Plant and animal fibers	117.0	110.4	86.5	79.4	90.9	86.9	96.7	99.3	101.4	101.2
Fluid milk	97.5	112.6	106.3	104.6	91.5	94.5	93.0	96.1	93.8	90.7
Oilseeds	140.8	114.4	90.8	87.1	97.1	90.8	87.4	92.8	90.1	89.9
Leaf tobacco	105.1	104.6	101.6	107.3	--	--	97.0	107.0	106.4	104.3
Raw cane sugar	116.8	117.2	113.7	100.2	104.6	97.0	94.7	99.8	111.3	113.8

-- = Not available. 1. Commodities ready for sale to ultimate consumer. 2. Includes all raw, intermediate, and processed foods (excludes soft drinks, alcoholic beverages, and manufactured animal feeds). 3. Commodities requiring further processing to become finished goods. 4. All types and sizes of refined sugar. 5. Products entering market for the first time that have not been manufactured at that point. 6. Fresh and dried.

This table is compiled with data provided by the Bureau of Labor Statistics (BLS). BLS operates a website at <http://stats.bls.gov/blshtml> and a Producer Prices Information Hotline at (202) 606-7705.

## Farm-Retail Price Spreads

Table 8—Farm-Retail Price Spreads

	Annual		1999		2000					
	1997	1998	1999	Aug	Mar	Apr	May	Jun	Jul	Aug
Market basket <sup>1</sup>										
Retail cost (1982-84=100)	159.7	163.1	167.3	167.1	168.0	168.5	170.1	169.7	170.8	171.7
Farm value (1982-84=100)	106.2	103.3	98.3	98.7	94.6	96.6	95.8	95.9	96.0	97.1
Farm-retail spread (1982-84=100)	188.6	195.4	204.5	203.9	207.5	207.3	210.1	209.5	211.1	211.9
Farm value-retail cost (%)	23.3	22.2	20.6	20.7	19.7	20.1	19.7	19.8	19.7	19.8
Meat products										
Retail cost (1982-84=100)	144.4	141.6	142.3	142.8	145.7	147.0	150.1	151.7	152.7	153.9
Farm value (1982-84=100)	101.2	84.8	81.6	83.8	86.9	86.1	87.4	87.5	88.9	89.4
Farm-retail spread (1982-84=100)	188.6	200.0	204.7	203.3	206.1	209.5	214.4	217.6	218.1	220.1
Farm value-retail cost (%)	35.5	30.3	29.0	29.7	30.2	29.7	29.5	29.2	29.5	29.4
Dairy products										
Retail cost (1982-84=100)	145.5	150.8	159.6	156.5	159.1	160.6	159.6	159.5	160.5	161.0
Farm value (1982-84=100)	98.0	113.0	107.9	107.4	95.0	95.3	96.0	96.1	101.7	99.5
Farm-retail spread (1982-84=100)	189.3	185.6	207.2	201.8	218.2	220.8	218.3	217.9	214.7	217.7
Farm value-retail cost (%)	32.3	36.0	32.4	32.9	28.7	28.5	28.9	28.9	30.4	29.7
Poultry										
Retail cost (1982-84=100)	156.6	157.1	157.9	158.5	158.6	158.5	159.6	159.3	161.8	161.3
Farm value (1982-84=100)	120.6	126.1	119.0	119.0	113.1	118.2	119.8	120.4	121.9	115.6
Farm-retail spread (1982-84=100)	198.1	192.9	202.7	204	211	204.9	205.4	204.1	207.7	213.9
Farm value-retail cost (%)	41.2	42.9	40.3	40.2	38.2	39.9	40.2	40.5	40.3	38.4
Eggs										
Retail cost (1982-84=100)	140.0	137.1	128.1	130.8	127.1	129.5	124.1	125.9	125.5	130.5
Farm value (1982-84=100)	99.3	89.6	74.9	72.2	65.6	82.0	54.0	75.8	64.3	87.1
Farm-retail spread (1982-84=100)	213.0	222.5	223.7	236.1	237.5	214.9	250.1	215.9	235.5	208.4
Farm value-retail cost (%)	45.6	42.0	37.6	35.5	33.2	40.7	27.9	38.7	32.9	42.9
Cereal and bakery products										
Retail cost (1982-84=100)	177.6	181.1	185.0	184.9	186.1	187.2	188.6	187.7	189.6	189.9
Farm value (1982-84=100)	107.7	94.4	82.5	81.8	75.7	76.5	75.5	74.3	70.0	70.0
Farm-retail spread (1982-84=100)	187.4	193.2	199.2	199.3	201.5	202.7	204.4	203.5	206.3	206.6
Farm value-retail cost (%)	7.4	6.4	5.5	5.4	5.0	5.0	4.9	4.8	4.5	4.5
Fresh fruit										
Retail cost (1982-84=100)	245.1	258.2	294.3	294.2	283.0	282.2	282.7	267.8	272.2	277.7
Farm value (1982-84=100)	137.0	141.3	153.7	157.1	149.9	150.1	132.8	131.8	114.6	134.0
Farm-retail spread (1982-84=100)	295.0	312.2	359.3	357.5	344.5	343.2	351.9	330.6	345.0	344.0
Farm value-retail cost (%)	17.7	17.3	16.5	16.9	16.7	16.8	14.8	15.5	13.3	15.2
Fresh vegetables										
Retail cost (1982-84=100)	194.6	215.8	209.3	204.8	212.1	213.6	219.1	217.7	216.7	217.3
Farm value (1982-84=100)	118.7	124.5	118.1	113.5	109.4	126.0	136.0	125.7	127.0	131.3
Farm-retail spread (1982-84=100)	233.6	262.7	256.2	251.7	264.9	258.6	261.8	265.0	262.8	261.5
Farm value-retail cost (%)	20.7	19.6	19.2	18.8	17.5	20.0	21.1	19.6	19.9	20.5
Processed fruits and vegetables										
Retail cost (1982-84=100)	147.9	150.6	154.8	156.5	152.4	151.7	153.7	154	154.5	155.3
Farm value (1982-84=100)	115.9	115.1	113.5	114.5	111.3	111.9	111.6	110.5	110.5	110.2
Farm-retail spread (1982-84=100)	157.9	161.7	167.7	169.6	165.2	164.1	166.8	167.6	168.2	169.4
Farm value-retail cost (%)	18.6	18.2	17.4	17.4	17.4	17.5	17.3	17.1	17.0	16.9
Fats and oils										
Retail cost (1982-84=100)	141.7	146.9	148.3	148.6	145.9	144.8	147.0	146.6	148.1	148.9
Farm value (1982-84=100)	109.4	118.9	89.0	80.8	86.5	88.4	85.8	82.0	78.3	76.1
Farm-retail spread (1982-84=100)	153.6	157.2	170.0	173.5	167.8	165.5	169.5	170.4	173.8	175.7
Farm value-retail cost (%)	20.8	21.8	16.2	14.6	15.9	16.4	15.7	15.0	14.2	13.7

See footnotes at end of table, next page.

**Table 8—Farm-Retail Price Spreads (continued)**

	1997	1998	1999	Nov	Jun	Jul	Aug	Sep	Oct	Nov
Beef, all fresh retail value (cents/lb.)	253.8	253.3	260.5	263.7	278.6	279.5	280.2	280.9	279.9	279.0
Beef, Choice										
Retail value (cents/lb.) <sup>2</sup>	279.5	277.1	287.8	300.0	311.5	310.0	309.9	313.0	311.8	310.3
Wholesale value (cents/lb.) <sup>3</sup>	158.2	153.8	171.6	180.5	190.7	179.6	172.6	168.6	174.4	182.8
Net farm value (cents/lb.) <sup>4</sup>	137.2	130.8	141.1	149.7	149.2	144.7	138.5	136.6	143.6	152.4
Farm-retail spread (cents/lb.)	142.3	146.3	146.7	150.3	162.3	165.3	171.4	176.4	168.2	157.9
Wholesale-retail (cents/lb.) <sup>5</sup>	121.3	123.3	116.2	119.5	120.8	130.4	137.3	144.4	137.4	127.5
Farm-wholesale (cents/lb.) <sup>6</sup>	21.0	23.0	30.5	30.8	41.5	34.9	34.1	32.0	30.8	30.4
Farm value-retail value (%)	49.1	47.2	49.0	49.9	47.9	46.7	44.7	43.6	46.1	49.1
Pork										
Retail value (cents/lb.) <sup>2</sup>	245.0	242.7	241.5	244.7	260.3	262.3	265.6	265.0	262.1	259.3
Wholesale value (cents/lb.) <sup>3</sup>	123.1	97.3	99.0	97.7	122.1	123.1	117.3	111.9	114.3	78.4
Net farm value (cents/lb.) <sup>4</sup>	95.3	61.2	60.4	62.4	91.7	90.0	80.8	77.2	76.3	65.9
Farm-retail spread (cents/lb.)	149.7	181.5	181.1	182.3	168.6	172.3	184.8	187.8	185.8	193.4
Wholesale-retail (cents/lb.) <sup>5</sup>	121.9	145.4	142.5	147.0	138.2	139.2	148.3	153.1	147.8	180.9
Farm-wholesale (cents/lb.) <sup>6</sup>	27.8	36.1	38.6	35.3	30.4	33.1	36.5	34.7	38.0	12.5
Farm value-retail value (%)	38.9	25.2	25.0	25.5	35.2	34.3	30.4	29.1	29.1	25.4

1. Retail costs are based on CPI-U of retail prices for domestically produced farm foods, published monthly by the Bureau of Labor Statistics (BLS). Farm value is the payment for the quantity of farm equivalent to the retail unit, less allowance for by-product. Farm values are based on prices at first point of sale, and may include marketing charges such as grading and packing for some commodities. The farm-retail spread, the difference between the retail value and farm value, represents charges for assembling, processing, transporting and distributing. 2. Weighted-average value of retail cuts from pork and Choice yield grade 3 beef. Prices from BLS. 3. Value of wholesale (boxed beef) and wholesale cuts (pork) equivalent to 1 lb. of retail cuts adjusted for transportation costs and by-product values. 4. Market value to producer for live animal equivalent to 1 lb. of retail cuts, minus value of by-products. 5. Charges for retailing and other marketing services such as wholesaling and in-city transportation. 6. Charges for livestock marketing, processing, and transportation. *Information contact: Veronica Jones (202) 694-5387, William F. Hahn (202) 694-5175*

**Table 9—Price Indexes of Food Marketing Costs**

	Annual			1999				2000		
	1997	1998	1999	I	II	III	IV	I	II	III
	1987=100*									
Labor—hourly earnings and benefits	474.3	490.4	503.3	498.6	503.5	504.2	506.7	508.2	512.0	512.9
Processing	486.0	499.3	511.4	504.2	512.1	513.4	515.6	518.1	523.4	527.6
Wholesaling	536.2	552.5	564.6	565.3	572.8	575.2	580.0	578.9	586.4	587.3
Retailing	435.2	454.1	465.8	463.6	464.2	463.8	465.4	467.1	467.8	465.2
Packaging and containers	390.3	395.5	399.4	390.3	396.4	403.0	407.7	410.3	410.6	413.5
Paperboard boxes and containers	341.9	365.2	373.0	355.7	368.3	380.2	387.8	391.9	413.0	412.4
Metal cans	491.0	487.9	486.6	486.6	486.6	486.6	486.6	489.5	440.1	440.1
Paper bags and related products	441.9	432.9	440.9	425.6	435.7	446.3	455.8	457.3	472.4	477.6
Plastic films and bottles	326.6	322.8	324.2	319.7	321.4	325.9	329.6	329.4	330.6	342.4
Glass containers	447.4	446.8	447.1	447.8	447.8	447.0	445.8	450.1	451.1	451.1
Metal foil	233.4	232.0	227.3	228.2	226.1	226.7	228.0	229.8	231.3	233.8
Transportation services	430.0	428.3	394.0	393.5	394.2	394.2	394.2	392.3	393.3	394.6
Advertising	609.4	624.5	623.7	622.2	622.9	623.9	625.6	633.6	635.0	635.7
Fuel and power	668.5	619.7	651.5	586.6	627.3	681.1	711.9	816.5	822.2	866.1
Electric	499.2	492.1	489.4	479.0	484.0	505.9	488.5	477.2	487.0	523.8
Petroleum	616.7	457.0	565.9	388.4	504.0	613.2	758.1	1,114.0	1,102.2	1,160.6
Natural gas	1,214.0	1,239.4	1,235.6	1,206.3	1,222.8	1,272.7	1,240.4	1,235.3	1,259.8	1,300.7
Communications, water and sewage	302.8	307.6	309.3	309.3	308.5	308.9	310.6	310.3	307.8	308.7
Rent	265.6	260.5	256.9	257.5	257.3	256.4	256.4	256.8	258.0	258.0
Maintenance and repair	514.9	529.3	541.6	537.9	540.7	542.5	545.3	552.2	558.3	564.7
Business services	512.3	522.9	531.9	528.1	530.2	533.3	536.1	540.3	543.2	543.7
Supplies	337.8	332.3	327.7	326.1	325.9	327.1	331.7	365.6	338.2	344.5
Property taxes and insurance	580.1	598.3	619.7	609.6	615.2	622.8	631.3	639.8	647.4	658.6
Interest, short-term	108.9	103.7	103.7	93.2	96.7	109.7	115.2	111.3	116.6	117.7
Total marketing cost index	459.9	467.2	472.2	465.1	470.7	475.2	479.1	486.7	488.8	492.4

Last two quarters preliminary. \* Indexes measure changes in employee earnings and benefits and in prices of supplies used in processing, wholesaling, and retailing U.S. farm foods purchased for at-home consumption. *Information contact: Veronica Jones (202) 694-5387*

## Livestock & Products

**Table 10—U.S. Meat Supply & Use**

	Beg. stocks	Production <sup>1</sup>	Imports	Total supply	Exports	Ending stocks	Consumption		Conversion factor <sup>3</sup>	Primary market price <sup>4</sup>
							Total	Per capita <sup>2</sup>		
							Million lbs. <sup>5</sup>			
							Lbs.		\$/cwt	
<b>Beef</b>										
1997	377	25,490	2,344	28,211	2,136	465	25,611	67	0.700	66.32
1998	465	25,760	2,643	28,868	2,171	393	26,305	68	0.700	61.48
1999	393	26,493	2,874	29,760	2,417	411	26,932	69	0.700	65.56
2000	411	26,920	3,076	30,407	2,565	440	27,402	70	0.700	69
2001	440	25,631	3,070	29,141	2,545	365	26,231	66	0.700	75
<b>Pork</b>										
1997	366	17,274	634	18,274	1,044	408	16,823	49	0.776	54.30
1998	408	19,011	705	20,124	1,230	584	18,309	53	0.776	34.72
1999	584	19,308	827	20,720	1,278	489	18,952	54	0.776	34.00
2000	489	18,925	987	20,401	1,257	525	18,619	52	0.776	44
2001	525	19,380	1,005	20,910	1,305	550	19,055	53	0.776	42
<b>Veal<sup>6</sup></b>										
1997	7	334	0	341	0	8	333	1	0.83	82
1998	8	262	0	270	0	5	265	1	0.83	82
1999	5	235	0	240	0	5	235	1	0.83	90
2000	5	225	0	230	0	4	226	1	0.83	106
2001	4	208	0	212	0	4	208	1	0.83	105
<b>Lamb and mutton</b>										
1997	9	260	83	352	6	14	332	1	0.89	88
1998	14	251	112	377	6	12	360	1	0.89	74
1999	12	248	113	372	5	9	358	1	0.89	76
2000	9	232	126	367	6	11	350	1	0.89	80
2001	11	220	131	362	4	10	348	1	0.89	80
<b>Total red meat</b>										
1997	759	43,358	3,061	47,178	3,185	894	43,099	118	--	--
1998	894	45,284	3,461	49,639	3,407	994	45,239	123	--	--
1999	994	46,284	3,813	51,092	3,700	914	46,477	125	--	--
2000	914	46,302	4,189	51,405	3,828	980	46,597	124	--	--
2001	980	45,439	4,206	50,625	3,854	929	45,842	121	--	--
<i>¢/lb</i>										
<b>Broilers</b>										
1997	641	27,041	5	27,687	4,664	607	22,416	72	0.859	59
1998	607	27,612	5	28,225	4,673	711	22,841	73	0.859	63
1999	711	29,468	4	30,183	4,920	796	24,468	77	0.859	58
2000	796	30,075	6	30,877	5,423	850	24,603	77	0.859	56
2001	850	31,176	4	32,030	5,430	880	25,720	80	0.859	55
<b>Mature chickens</b>										
1997	6	510	0	516	384	7	125	1	1.0	--
1998	7	525	0	533	426	6	101	1	1.0	--
1999	6	554	0	562	393	8	162	1	1.0	--
2000	8	538	0	547	242	5	300	1	1.0	--
2001	5	564	0	571	240	10	321	1	1.0	--
<b>Turkeys</b>										
1997	328	5,412	1	5,741	606	415	4,720	18	1.0	65
1998	415	5,215	0	5,630	446	304	4,880	18	1.0	62
1999	304	5,230	1	5,535	379	254	4,902	18	1.0	69
2000	254	5,339	1	5,594	423	235	4,936	18	1.0	71
2001	235	5,528	1	5,764	420	275	5,068	18	1.0	68
<b>Total poultry</b>										
1997	975	32,964	6	33,944	5,654	1,029	27,261	90	--	--
1998	1,029	33,352	6	34,387	5,545	1,022	27,821	91	--	--
1999	1,022	35,252	7	36,281	5,692	1,058	29,531	96	--	--
2000	1,058	35,952	9	37,018	6,089	1,090	29,839	96	--	--
2001	1,090	37,268	7	38,365	6,090	1,165	31,108	99	--	--
<b>Red meat and poultry</b>										
1997	1,734	76,321	3,067	81,123	8,839	1,923	70,360	208	--	--
1998	1,923	78,637	3,467	84,027	8,951	2,016	73,060	214	--	--
1999	2,016	81,537	3,820	87,372	9,392	1,972	76,008	220	--	--
2000	1,972	82,254	4,198	88,423	9,916	2,070	76,436	220	--	--
2001	2,070	82,707	4,213	88,990	9,944	2,094	76,950	220	--	--

-- = Not available. Values for the last 2 years are forecasts. 1. Total including farm production for red meat and federally inspected plus nonfederally inspected for poultry. 2. Retail-weight basis. 3. Red meat, carcass to retail conversion; poultry, ready-to-cook production to retail weight. 4. Beef: Medium #1, Nebraska Direct 1,100-1,300 lb.; pork: barrows and gilts, Iowa, Southern Minnesota; veal: farm price of calves; lamb and mutton: choice slaughter lambs, San Angelo; broilers: wholesale 12-city average; turkeys: wholesale NY 8-16 lb. young hens. 5. Carcass weight for red meats and certified ready-to-cook for poultry. 6. Beginning in 1989, veal trade is no longer reported separately. *Information contact: LaVerne Williams (202) 694-5190*

**Table 11—U.S. Egg Supply & Use**

	Beg. stocks	Production	Imports	Total supply	Exports	Hatching use	Ending stocks	Consumption		Primary market price*
								Total	Per capita	
								No.		¢/doz.
								Million doz.		
1994	10.7	6,177.6	3.7	6,192.0	187.6	805.4	14.9	5,184.1	238.7	67.3
1995	14.9	6,215.6	4.1	6,234.6	208.9	847.2	11.2	5,167.3	235.6	72.9
1996	11.2	6,350.7	5.4	6,367.3	253.1	863.8	8.5	5,241.8	236.8	88.2
1997	8.5	6,473.1	6.9	6,488.5	227.8	894.7	7.4	5,358.6	240.1	81.2
1998	7.4	6,657.9	5.8	6,671.2	218.8	921.8	8.4	5,522.2	244.9	75.8
1999	8.4	6,912.0	7.4	6,927.8	161.7	941.7	7.6	5,816.7	255.7	65.6
2000	7.6	7,027.5	8.9	7,044.0	167.6	941.5	10.0	5,924.9	258.1	67.5
2001	10.0	7,100.0	5.0	7,115.0	170.0	965.0	5.0	5,975.0	258.1	65.5

Values for the last year are forecasts. Values for previous year are preliminary. \* Cartoned grade A large eggs, New York.

Information contact: LaVerne Williams (202) 694-5190

**Table 12—U.S. Milk Supply & Use<sup>1</sup>**

Production	Commercial			Total commercial supply	CCC net removals	Commercial		All milk price <sup>1</sup>	CCC net removals			
	Farm use	Farm marketings	Beg. stocks			Ending stocks	Disappearance		Skim solids basis	Total solids basis <sup>2</sup>		
Million lbs. (milkfat basis)												
\$/cwt												
Billion lbs.												
1993	150.6	1.8	148.8	4.7	2.8	156.3	6.6	4.5	145.1	12.80	3.9	5.0
1994	153.6	1.7	151.9	4.5	2.9	159.3	4.8	4.3	150.3	12.97	3.7	4.2
1995	155.3	1.6	153.7	4.3	2.9	160.9	2.1	4.1	154.9	12.74	4.4	3.5
1996	154.0	1.5	153.5	4.1	2.9	159.5	0.1	4.7	154.7	14.74	0.7	0.5
1997	156.1	1.4	154.7	4.7	2.7	162.1	1.1	4.9	156.1	13.34	3.7	2.7
1998	157.4	1.4	156.1	4.9	4.6	165.5	0.4	5.3	159.9	15.42	4.0	2.6
1999	162.7	1.4	161.3	5.3	4.7	171.4	0.3	6.1	164.9	14.36	6.5	4.0
2000	168.4	1.3	167.1	6.1	4.4	177.6	0.9	6.4	170.3	12.30	8.8	5.6
2001	169.7	1.3	168.4	6.4	4.3	179.1	0.5	5.5	173.1	12.80	6.7	4.2

Values for latest year are forecasts. Values for the preceding year are preliminary. 1. Delivered to plants and dealers; does not reflect deductions.

2. Arbitrarily weighted average of milkfat basis (40 percent) and solids basis (60 percent). Information contact: Jim Miller (202) 694-5184

**Table 13—Poultry & Eggs**

	Annual			1999		2000				
	1997	1998	1999	Oct	May	Jun	Jul	Aug	Sep	Oct
<b>Broilers</b>										
Federally inspected slaughter certified (mil. lb.)	27,270.7	27,862.7	29,741.4	2,481.0	2,741.9	2,672.9	2,417.6	2,743.7	2,341.6	2,595.1
Wholesale price, 12-city (cents/lb.)	58.8	63.0	58.1	54.9	55.7	56.0	56.6	55.5	58.4	57.2
Price of grower feed (\$/ton) <sup>1</sup>	157.7	129.0	102.9	98.0	115.6	108.8	97.4	94.6	97.5	98.5
Broiler-feed price ratio <sup>2</sup>	4.7	6.3	7.2	7	6.4	6.8	7.7	7.4	8.0	6.7
Stocks beginning of period (mil. lb.)	641.3	606.8	711.1	884.7	842.6	816.5	813.5	817.2	801.7	808.9
Broiler-type chicks hatched (mil.)	8,321.6	8,491.9	8,715.7	697.4	775.2	748.0	739.9	739.9	704.9	711.0
<b>Turkeys</b>										
Federally inspected slaughter certified (mil. lb.)	5,477.9	5,280.6	5,296.5	472.6	492.3	483.4	425.3	482.8	422.9	496.4
Wholesale price, Eastern U.S. 8-16 lb. young hens (cents/lb.)	64.9	62.2	69.0	79.3	69.2	70.4	71.6	73.6	76.5	78.7
Price of turkey grower feed (\$/ton) <sup>1</sup>	142.7	115.9	95	90.6	104.9	97.9	88.2	86.7	89.0	91.8
Turkey-feed price ratio <sup>2</sup>	5.6	6.7	8.6	10	7.7	8.5	9.5	9.9	10.0	10
Stocks beginning of period (mil. lb.)	328.0	415.1	304.3	596.4	413.3	477.0	503.6	524.1	524.8	527.8
Poults placed in U.S. (mil.)	321.5	297.8	297.3	22.3	26.3	27.0	27.1	24.8	23.0	23.7
<b>Eggs</b>										
Farm production (mil.)	77,677	79,927	82,939	7,131	7,105	6,804	7,063	7,099	6,837	7,106
Average number of layers (mil.)	304	313	322.9	325.3	326	325	325.7	325	326	327.1
Rate of lay (eggs per layer on farms)	255.3	255.4	256.8	21.9	21.8	20.9	21.7	21.8	21.0	21.7
Cartoned price, New York, grade A large (cents/doz.) <sup>3</sup>	81.2	75.8	65.6	56.9	53.4	64.2	61.9	72.5	67.1	73
Price of laying feed (\$/ton) <sup>1</sup>	160.0	137.7	125.4	131.8	165.1	131.0	124.3	104.8	117.1	110.5
Egg-feed price ratio <sup>2</sup>	8.8	9.8	9.8	8.0	6.3	9.6	9.2	13.0	10.3	12.4
Stocks, first of month Frozen (mil. doz.)	7.7	7.4	8.4	7.2	5.4	6.2	6.6	10.9	11.3	10.9
Replacement chicks hatched (mil.)	424.5	438.3	450.9	39	40.9	36.6	33.1	34.3	36.3	35.2

1. Calculated from price ratios that were revised February 1995. 2. Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight (revised February 1995). 3. Price of cartoned eggs to volume buyers for delivery to retailers. Information contact: LaVerne Williams (202) 694-5190

Table 14—Dairy

	Annual			1999		2000				
	1997	1998	1999	Oct	May	Jun	Jul	Aug	Sep	Oct
Class III (BFP before 2000) 3.5% fat (\$/cwt.)	12.05	14.20	12.43	11.49	9.37	9.46	10.66	10.13	10.76	10.02
Wholesale prices										
Butter, Central States (cents/lb.) <sup>1</sup>	116.2	177.6	125.2	113.7	122.2	128.6	120.3	120.3	119.1	116.9
Am. cheese, Wis. assembly pt. (cents/lb.)	132.4	158.1	142.3	134.0	110.6	120	125.2	125.5	133.4	109.4
Nonfat dry milk (cents/lb.) <sup>2</sup>	110.0	106.9	103.5	104.5	100.1	101.2	102.2	102.3	102.4	102.3
USDA net removals										
Total (mil. lb.) <sup>3</sup>	1,090.3	365.6	343.5	27.2	106.9	78	54.5	45.9	37.8	33.8
Butter (mil. lb.)	38.4	6.3	3.7	0.5	0.8	0.7	0.2	0	0	0
Am. cheese (mil. lb.)	11.3	8.2	4.6	0.4	4.5	1.9	2.1	1.5	0.9	1.2
Nonfat dry milk (mil. lb.)	298.0	326.4	540.6	33.4	81.8	61.9	42.1	50.5	40.1	50.4
Milk										
Milk prod. 20 states (mil. lb.)	133,314	134,900	140,029	11,549	12,743	12,083	12,232	11,966	11,500	11,859
Milk per cow (lb.)	17,180	17,501	18,103	1,491	1,635	1,547	1,561	1,526	1,465	1,511
Number of milk cows (1,000)	7,760	7,708	7,735	7,746	7,795	7,810	7,834	7,840	7,849	7,850
U.S. milk production (mil. lb.) <sup>4</sup>	156,091	157,348	162,711	13,418	14,778	14,008	14,168	13,855	13,310	13,718
Stocks, beginning <sup>3</sup>										
Total (mil. lb.)	4,714	4,907	5,301	7,487	9,602	9,983	10,376	10,676	9,581	8,736
Commercial (mil. lb.)	4,704	4,889	5,274	7,444	9,520	9,884	10,255	10,541	9,446	8,603
Government (mil. lb.)	10	18	28	43	82	100	121	135	134	133
Imports, total (mil. lb.) <sup>3</sup>	2,698	4,588	4,772	432	412	439	448	444	299	--
Commercial disappearance (mil. lb.) <sup>3</sup>	156,118	159,779	164,911	14,174	14,607	13,889	14,162	15,236	14,305	--
Butter										
Production (mil. lb.)	1,151.2	1,168.0	1,275.0	103.1	111.2	91.8	87	85.6	91.6	105.0
Stocks, beginning (mil. lb.)	13.4	20.5	25.9	71.3	126.6	137.6	144.4	136.5	100.8	84.5
Commercial disappearance (mil. lb.)	1,108.7	1,222.5	1,308.6	113.2	102.7	90.9	101.8	125.6	109.2	--
American cheese										
Production (mil. lb.)	3,285.6	3,314.7	3,576.5	295.3	326.5	310.6	321.7	301.6	287.6	297.3
Stocks, beginning (mil. lb.)	379.6	410.3	407.6	473.6	547.9	554.6	570.2	613.1	592.4	562.1
Commercial disappearance (mil. lb.)	3,269.0	3,338.6	3,586.1	318.5	321.8	297.5	279.9	329.1	318.6	--
Other cheese										
Production (mil. lb.)	4,044.9	4,177.5	4,367.5	376.6	410.6	387	368.3	384.9	367.5	387
Stocks, beginning (mil. lb.)	107.3	70.0	109.5	177.6	200.7	208.8	212.0	221.5	207.2	181.8
Commercial disappearance (mil. lb.)	4,366.6	4,452.0	4,678.1	426.8	432.6	412.7	388	429.6	423.3	--
Nonfat dry milk										
Production (mil. lb.)	1,271.6	1,135.4	1,378.2	105.3	137.9	128.3	121.7	104.5	96.3	104.1
Stocks, beginning (mil. lb.)	71.1	103.3	56.9	96.6	197.4	197	170.7	189.6	152.1	130
Commercial disappearance (mil. lb.)	894.1	866.9	791.1	72.3	57.1	93.1	61.5	92.2	78.8	--
Frozen dessert										
Production (mil. gal.) <sup>5</sup>	1,290.0	1,324.3	1,311.8	94.5	127.3	133.8	127.4	123.1	103.3	102.8

-- = Not available. Quarterly values for latest year are preliminary. 1. Grade AA Chicago before June 1998. 2. Prices paid f.o.b. Central States production area. 3. Milk equivalent, fat basis. 4. Monthly data ERS estimates. 5. Hard ice cream, ice milk, and hard sherbet.

Information contact: LaVerne Williams (202) 694-5190

Table 15—Wool

	Annual			1998				1999			2000		
	1997	1998	1999	IV	I	II	III	IV	I	II	III		
U.S. wool price (¢/lb.) <sup>1</sup>	238	162	110	115	115	116	110	98	97	120	117		
Imported wool price (¢/lb.) <sup>2</sup>	206	164	136	141	146	142	133	125	133	139	139		
U.S. mill consumption, scoured													
Apparel wool (1,000 lb.)	130,386	98,373	65,468	17,530	17,294	16,815	15,793	13,633	17,142	15,655	14,184		
Carpet wool (1,000 lb.)	13,576	16,331	15,017	4,388	4,220	3,581	3,183	2,966	3,784	3,327	3,650		

NA = Not available. 1. Wool price delivered at U.S. mills, clean basis, Graded Territory 64's (20.60-22.04 microns) staple 2-3/4" and up. 2. Wool price, Charleston, SC warehouse, clean basis, Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10 cents.

Information contact: Mae Dean Johnson (202) 694-5299

Table 16—Meat Animals

	Annual			1999			2000			
	1997	1998	1999	Nov	Jun	Jul	Aug	Sep	Oct	Nov
Cattle on feed (7 states, 1000+ head capacity)										
Number on feed (1,000 head) <sup>1</sup>	8,943	9,455	9,021	9,789	9,411	8,959	8,812	8,972	9,502	10,192
Placed on feed (1,000 head)	20,765	19,697	21,446	1,823	1,413	1,674	2,091	2,286	2,387	1,678
Marketings (1,000 head)	19,552	19,440	20,124	1,530	1,828	1,784	1,895	1,708	1,647	1,568
Other disappearance (1,000 head)	701	691	676	62	37	37	36	48	50	89
Market prices (\$/cwt)										
Slaughter cattle										
Choice steers, 1,100-1,300 lb.										
Texas	65.99	61.75	65.89	70.28	69.41	67.22	65.02	65.43	68.51	72.19
Neb. direct	66.32	61.48	65.65	70.31	69.59	66.46	64.69	67.93	65.14	72.16
Boning utility cows, Sioux Falls	34.27	36.20	38.40	37.88	45.38	43.88	43.00	41.88	38.25	39.83
Feeder steers										
Medium no. 1, Oklahoma City										
600-650 lb.	81.34	77.70	82.64	87.19	95.23	98.07	94.07	90.97	92.15	96.15
750-800 lb.	76.19	71.80	76.39	80.53	86.71	89.25	85.85	83.64	85.96	89.80
Slaughter hogs										
Barrows and gilts, 51-52 percent lean										
National Base converted to live equal.	54.30	34.72	34.02	37.70	51.48	50.45	45.35	43.49	43.09	37.84
Sows, Iowa, S.MN 1-2 300-400 lb.	40.24	20.29	19.26	19.25	33.70	32.31	32.55	30.72	31.45	26.90
Slaughter sheep and lambs										
Lambs, Choice, San Angelo										
	87.95	74.20	75.97	78.00	78.30	84.17	82.20	82.00	77.50	76.70
Ewes, Good, San Angelo										
	49.33	40.90	42.32	41.17	44.86	48.00	41.40	43.43	43.18	45.85
Feeder lambs										
Choice, San Angelo										
	104.43	79.59	81.05	82.54	91.14	93.25	91.70	93.89	92.00	103.65
Wholesale meat prices, Midwest										
Boxed beef cut-out value										
Choice, 700-800 lb.										
	102.75	98.60	111.55	119.37	123.85	115.60	110.33	108.56	112.66	119.09
Select, 700-800 lb.										
	96.15	92.19	101.99	106.37	110.16	106.87	106.59	102.08	102.02	110.29
Canner and cutter cow beef										
	64.50	61.49	66.66	66.00	74.20	75.33	73.04	69.57	78.04	83.09
Pork cutout										
	70.87	53.08	53.45	54.50	70.07	70.45	65.69	63.22	62.40	56.75
Pork loins, bone-in, 1/4 " trim, 14-19 lb.										
	128.75	102.04	100.25	93.13	132.53	131.73	120.45	119.22	119.31	110.23
Pork bellies, 12-14 lb.										
	73.91	52.38	57.43	71.50	91.99	90.38	75.64	63.94	55.79	52.08
Hams, bone-in, trimmed, 20-23 lb.										
	--	--	47.90	66.50	54.43	60.07	60.99	64.41	65.12	73.52
All fresh beef retail price	253.77	253.28	260.50	263.70	278.60	279.50	280.20	280.90	279.90	279.00
Commercial slaughter (1,000 head) <sup>2</sup>										
Cattle										
Steers	36,318	35,465	36,150	2,940	3,237	2,962	3,260	3,035	3,142	--
Heifers	17,529	17,428	17,936	1,375	1,676	1,600	1,681	1,516	1,478	--
Cows	11,528	11,448	11,866	980	1,041	917	1,061	1,022	1,101	--
Bull and stags	6,564	5,983	5,708	533	464	396	459	444	508	--
Calves	696	606	639	52	56	49	59	52	54	--
Sheep and lambs	1,575	1,458	1,484	103	95	99	100	93	97	--
Hogs	3,911	3,911	3,698	330	260	243	283	269	279	--
Barrows and gilts	91,960	101,029	101,544	8,896	7,952	7,357	8,622	8,118	8,881	--
Commercial production (mil. lb.)	88,409	97,030	97,738	8,580	7,654	7,084	8,310	7,840	8,579	--
Beef	25,384	25,653	25,656	2,144	2,369	2,202	2,437	2,275	2,345	--
Veal	324	252	250	19	19	18	18	17	18	--
Lamb and mutton	257	248	247	22	17	16	17	17	18	--
Pork	17,244	18,981	18,981	1,707	1,536	1,408	1,641	1,552	1,715	--
	Annual			1999			2000			
	1997	1998	1999	II	III	IV	I	II	III	IV
Hogs and pigs (U.S.) <sup>3</sup>										
Inventory (1,000 head) <sup>1</sup>	56,124	61,158	62,206	60,191	60,896	60,776	59,337	57,777	59,397	60,185
Breeding (1,000 head) <sup>1</sup>	6,578	6,957	6,682	6,527	6,515	6,301	6,244	6,200	6,234	6,266
Market (1,000 head) <sup>1</sup>	49,546	54,200	55,523	53,663	54,380	54,474	53,094	51,578	53,164	53,920
Farrowings (1,000 head)	11,479	12,061	11,666	2,986	2,920	2,844	2,798	2,900	2,903	2,883
Pig crop (1,000 head)	99,584	105,004	102,569	26,270	25,860	24,972	24,522	25,786	25,681	--
Cattle on Feed, 7 states (1,000 head) <sup>4</sup>										
Steers and steer calves	5,410	5,803	5,432	5,341	4,849	5,286	5,768	5,736	5,326	5,584
Heifers and heifer calves	3,455	3,615	3,552	3,527	3,302	3,479	3,942	3,800	3,602	3,877
Cows and bulls	78	59	37	31	44	28	42	37	31	41

-- = Not available. 1. Beginning of period. 2. Classes estimated. 3. Quarters are Dec. of preceding year to Feb. (I), Mar.-May (II), June-Aug. (III), and Sept.-Nov. (IV). 4. Beginning of period. The 7 states include AZ, CA, CO, IA, KS, NE, and TX. Information contact: Leland Southard (202) 694-5187

## Crops &amp; Products

Table 17—Supply & Utilization<sup>1,2</sup>

	Area		Yield	Production	Total supply <sup>4</sup>	Feed & residual	Other domestic use	Exports	Total use	Ending stocks	Farm price <sup>5</sup>	
	Set-aside <sup>3</sup>	Planted										Harvested
		Mil. Acres										Bu./acre
<b>Wheat</b>												
1996/97	--	75.1	62.8	36.3	2,277	2,746	308	993	1,002	2,302	444	4.30
1997/98	--	70.4	62.8	39.5	2,481	3,020	251	1,007	1,040	2,298	722	3.38
1998/99	--	65.8	59.0	43.2	2,547	3,373	394	990	1,042	2,427	946	2.65
1999/00*	--	62.7	53.8	42.7	2,299	3,339	284	1,016	1,090	2,390	950	2.48
2000/01*	--	62.5	53.2	42.1	2,239	3,289	250	1,026	1,125	2,401	888	2.35-2.75
		Mil. acres	Bu./acre					Mil. cwt (rough equiv)				\$/cwt
<b>Rice<sup>6</sup></b>												
1996/97	--	2.8	2.8	6,120.0	171.6	207.1	--	6/ 102.6	77.3	179.9	27.2	9.96
1997/98	--	3.1	3.1	5,897.0	183.0	219.4	--	6/ 104.6	87.0	191.5	27.9	9.70
1998/99	--	3.3	3.3	5,663.0	184.4	222.9	--	6/ 115.5	85.3	200.8	22.1	8.89
1999/00*	--	3.5	3.5	5,866.0	206.0	238.1	--	6/ 122.6	88.0	210.6	27.5	6.11
2000/01*	--	3.1	3.1	6,230.0	192.2	230.0	--	6/ 122.9	80.0	202.9	27.1	5.75-6.25
		Mil. acres	Bu./acre					Mil. bu.				\$/bu.
<b>Corn</b>												
1996/97	--	79.2	72.6	127.1	9,233	9,672	5,277	1,714	1,797	8,789	883	2.71
1997/98	--	79.5	72.7	126.7	9,207	10,099	5,482	1,805	1,504	8,791	1,308	2.43
1998/99	--	80.2	72.6	134.4	9,759	11,085	5,471	1,846	1,981	9,298	1,787	1.94
1999/00*	--	77.4	70.5	133.8	9,437	11,239	5,676	1,913	1,935	9,524	1,715	1.80
2000/01*	--	79.6	73.0	139.6	10,192	11,917	5,850	1,975	2,275	10,100	1,817	1.65-2.05
		Mil. acres	Bu./acre					Mil. bu.				\$/bu.
<b>Sorghum</b>												
1996/97	--	13.1	11.8	67.3	795	814	516	45	205	766	47	2.34
1997/98	--	10.1	9.2	69.2	634	681	365	55	212	632	49	2.21
1998/99	--	9.6	7.7	67.3	520	569	262	45	197	504	65	1.66
1999/00*	--	9.3	8.5	69.7	595	660	290	55	250	595	65	1.55
2000/01*	--	9.0	7.7	60.7	465	531	230	50	200	480	51	1.45-1.85
		Mil. acres	Bu./acre					Mil. bu.				\$/bu.
<b>Barley</b>												
1996/97	--	7.1	6.7	58.5	392	529	217	172	31	419	109	2.74
1997/98	--	6.7	6.2	58.1	360	510	144	172	74	390	119	2.38
1998/99	--	6.3	5.9	60.0	352	501	161	170	28	360	142	1.98
1999/00*	--	5.2	4.7	59.2	280	450	136	172	30	338	111	2.13
2000/01*	--	5.8	5.2	61.4	320	462	150	172	35	357	105	2.10-2.40
		Mil. acres	Bu./acre					Mil. bu.				\$/bu.
<b>Oats</b>												
1996/97	--	4.6	2.7	57.7	153	317	172	76	3	250	67	1.96
1997/98	--	5.1	2.8	59.5	167	332	185	72	2	258	74	1.60
1998/99	--	4.9	2.8	60.2	166	348	196	69	2	266	81	1.10
1999/00*	--	4.7	2.5	59.6	146	326	180	68	2	250	76	1.12
2000/01*	--	4.5	2.3	64.4	150	326	180	68	2	250	76	1.05-1.25
		Mil. acres	Bu./acre					Mil. bu.				\$/bu.
<b>Soybeans<sup>7</sup></b>												
1996/97	--	62.6	61.6	35.3	2,177	2,516	112	1,370	851	2,333	183	6.72
1997/98	--	70.0	69.1	38.9	2,689	2,826	156	1,597	873	2,626	200	6.47
1998/99	--	72.0	70.4	38.9	2,741	2,944	201	1,590	805	2,595	348	4.93
1999/00*	--	73.7	72.4	36.6	2,654	3,006	170	1,579	970	2,719	288	4.65
2000/01*	--	74.5	73.0	38.7	2,823	3,114	168	1,615	965	2,749	365	4.60-5.20
								Mil. lbs.				¢/lb.
<b>Soybean oil</b>												
1996/97	--	--	--	--	15,752	17,821	--	14,263	2,037	16,300	1,520	22.50
1997/98	--	--	--	--	18,143	19,723	--	15,262	3,079	18,341	1,382	25.84
1998/99	--	--	--	--	18,081	19,546	--	15,655	2,371	18,027	1,520	19.90
1999/00*	--	--	--	--	17,845	19,445	--	16,100	1,375	17,475	1,970	15.60
2000/01*	--	--	--	--	18,330	20,390	--	16,500	1,900	18,400	1,990	15.00-18.00
								1,000 tons				\$/ton <sup>8</sup>
<b>Soybean meal</b>												
1996/97	--	--	--	--	34,210	34,524	--	27,320	6,994	34,314	210	270.9
1997/98	--	--	--	--	38,176	38,443	--	28,895	9,329	38,225	218	185.5
1998/99	--	--	--	--	37,792	38,109	--	30,657	7,122	37,779	330	138.5
1999/00*	--	--	--	--	37,620	38,000	--	30,450	7,325	37,775	225	167.0
2000/01*	--	--	--	--	38,410	38,700	--	31,200	7,250	38,450	250	160-185

See footnotes at end of table, next page

**Table 17—Supply & Utilization (continued)**

	Area			Yield Lb./acre	Production	Total supply <sup>4</sup>	Feed & residual	Other domestic use	Exports	Total use	Ending stocks	Farm price <sup>5</sup> ¢/lb.
	Set- aside <sup>3</sup>	Planted	Harvested									
	Mil. Acres											
Cotton <sup>9</sup>												
1996/97	1.7	14.7	12.9	705	18.9	22.0	--	11.1	6.9	18.0	4.0	69.3
1997/98	0.3	13.9	13.4	673	18.8	22.8	--	11.3	7.5	18.8	3.9	65.2
1998/99	--	13.4	10.7	625	13.9	18.2	--	10.4	4.3	14.7	3.9	60.2
1999/00*	--	14.9	13.4	607	17.0	21.0	--	10.2	6.8	17.0	3.9	45.0
2000/01*	--	15.5	13.5	620	17.5	21.5	--	10.1	7.6	17.7	3.8	--

-- = Not available or not applicable. \*December 12, 2000 Supply and Demand Estimates. 1. Marketing year beginning June 1 for wheat, barley, and oats; August 1 for cotton and rice; September 1 for soybeans, corn, and sorghum; October 1 for soy meal and soy oil. 2. Conversion factors: Hectare (ha.) = 2.471 acres, 1 metric ton = 2,204.622 pounds, 36.7437 bushels of wheat or soybeans, 39.3679 bushels of corn or sorghum, 45.9296 bushels of barley, 68.8944 bushels of oats, 22.046 cwt of rice, and 4.59 480-pound bales of cotton. 3. Includes diversion, acreage reduction, 50-92, & 0-92 programs. 0/92 & 50/92 set-aside includes idled acreage and acreage planted to minor oilseeds, sesame, and crambe. 4. Includes imports. 5. Marketing-year weighted average price received by farmers. Does not include an allowance for loans outstanding and government purchases. 6. Residual included in domestic use. 7. Includes seed. 8. Simple average of 48 percent protein, Decatur. 9. Upland and extra-long staple. Stocks estimates based on Census Bureau data, resulting in an unaccounted difference between supply and use estimates and changes in ending stocks. Information contacts: Wheat, rice, feed grains, Jenny Gonzales (202) 694-5296; soybeans, soybean products, and cotton, Mae Dean Johnson (202) 694-5299

**Table 18—Cash Prices, Selected U.S. Commodities**

	Marketing year <sup>1</sup>			1999		2000				
	1997/98	1998/99	1999/00	Oct	May	Jun	Jul	Aug	Sep	Oct
Wheat, no. 1 HRW, Kansas City (\$/bu.) <sup>2</sup>	3.71	3.08	2.87	2.80	2.95	3.07	2.97	2.89	3.13	3.41
Wheat, DNS, Minneapolis (\$/bu.) <sup>3</sup>	4.31	3.83	3.65	3.70	3.80	3.78	3.50	3.29	3.17	3.69
Rice, S.W. La. (\$/cwt) <sup>4</sup>	18.92	16.79	12.99	14.00	11.88	11.47	11.43	11.69	11.91	12.38
Corn, no. 2 yellow, 30-day, Chicago (\$/bu.)	2.56	2.06	1.97	1.90	2.25	2.01	1.65	1.61	1.67	1.91
Sorghum, no. 2 yellow, Kansas City (\$/cwt)	4.11	3.29	3.10	2.71	3.75	3.18	2.71	2.76	2.67	3.14
Barley, feed, Duluth (\$/bu.)	1.90	--	--	--	--	--	--	--	--	1.30
Barley, malting Minneapolis (\$/bu.)	2.50	--	--	--	--	--	--	--	--	2.24
U.S. cotton price, SLM, 1-1/16 in. (¢/lb.) <sup>5</sup>	67.79	60.12	60.20	62.16	58.31	54.97	55.13	59.33	60.62	60.54
Northern Europe prices cotton index (¢/lb.) <sup>6</sup>	72.11	58.97	52.85	64.07	60.53	59.56	58.40	60.93	61.55	60.90
U.S. M 1-3/32 in. (¢/lb.) <sup>7</sup>	77.98	74.08	59.64	68.95	68.88	--	--	67.95	67.38	66.69
Soybeans, no. 1 yellow, 30-day Chicago (\$/bu)	6.51	5.13	5.10	4.60	5.34	5.03	4.58	4.50	4.71	4.57
Soybean oil, crude, Decatur (¢/lb.)	25.84	19.90	20.50	16.08	16.74	14.59	16.74	16.74	16.74	13.50
Soybean meal, 48% protein, Decatur (\$/ton)	185.54	138.50	165.45	159.15	187.90	187.05	168.45	162.64	181.13	176.73

-- = Not available. 1. Beginning June 1 for wheat and barley; Aug. 1 for rice and cotton; Sept. 1 for corn, sorghum, and soybeans; Oct. 1 for soy meal and oil. 2. Ordinary protein. 3. 14 percent protein. 4. Long grain, milled basis. 5. Average spot market. 6. Liverpool Cotlook "A" Index; average of 5 lowest prices of 13 selected growths. 7. Cotton, Memphis territory growths. Information contacts: Wheat, rice, and feed, Jenny Gonzales (202) 694-5296; soybeans, soybean products, and cotton, Mae Dean Johnson (202) 694-5299

Table 19—Farm Programs, Price Supports, Participation, &amp; Payment Rates

	Target price	Basic loan rate	Findley or announced loan rate <sup>1</sup>	Total deficiency payment rate	Effective base acres <sup>2</sup>	Program <sup>3</sup>	Flexibility contract payment rate	Acres under contract	Contract payment yields	Participation rate <sup>4</sup>
		\$/bu.			Mil. acres	Percent of base	\$/bu.	Mil. acres	Bu./acre	Percent
<b>Wheat</b>										
1995/96	4.00	2.69	2.58	0.00	77.70	0/0/0	--	--	--	85
1996/97	--	--	2.58	--	--	--	0.874	76.7	34.70	99
1997/98	--	--	2.58	--	--	--	0.631	76.7	34.70	--
1998/99	--	--	2.58	--	--	--	0.663	78.9	34.50	--
1999/2000 <sup>5</sup>	--	--	2.58	--	--	--	0.637	79.0	34.50	--
<b>Rice</b>										
		\$/cwt					\$/cwt		Cwt/acre	
1995/96	10.71	6.50	6.50 <sup>6</sup>	3.22 <sup>7</sup>	4.20	5/0/0	--	--	--	95
1996/97	--	6.50	--	--	--	--	2.766	4.2	48.27	99
1997/98	--	6.50	--	--	--	--	2.710	4.2	48.17	--
1998/99	--	6.50	--	--	--	--	2.921	4.2	48.17	--
1999/2000 <sup>5</sup>	--	6.50	--	--	--	--	2.820	4.2	48.15	--
<b>Corn</b>										
		\$/bu.					\$/bu.		Bu./acre	
1995/96	2.75	1.94	1.89	0.00	81.80	7.5/0/0	--	--	--	82
1996/97	--	--	1.89	--	--	--	0.251	80.7	102.90	98
1997/98	--	--	1.89	--	--	--	0.486	80.9	102.80	--
1998/99	--	--	1.89	--	--	--	0.377	82.0	102.60	--
1999/2000 <sup>5</sup>	--	--	1.89	--	--	--	0.363	81.9	102.60	--
<b>Sorghum</b>										
		\$/bu.					\$/bu.		Bu./acre	
1995/96	2.61	1.84	1.80	0.00	13.30	0/0/0	--	--	--	77
1996/97	--	--	1.81	--	--	--	0.323	13.1	57.30	99
1997/98	--	--	1.76	--	--	--	0.544	13.1	57.30	--
1998/99	--	--	1.74	--	--	--	0.452	13.6	56.90	--
1999/2000 <sup>5</sup>	--	--	1.74	--	--	--	0.435	13.7	56.90	--
<b>Barley</b>										
		\$/bu.					\$/bu.		Bu./acre	
1995/96	2.36	1.58	1.54	0.00	10.70	0/0/0	--	--	--	82
1996/97	--	--	1.55	--	--	--	0.332	10.5	47.30	99
1997/98	--	--	1.57	--	--	--	0.277	10.5	47.20	--
1998/99	--	--	1.56	--	--	--	0.284	11.2	46.70	--
1999/2000 <sup>5</sup>	--	--	1.59	--	--	--	0.271	11.2	46.60	--
<b>Oats</b>										
		\$/bu.					\$/bu.		Bu./acre	
1995/96	1.45	1.00	0.97	0.00	6.50	0/0/0	--	--	--	44
1996/97	--	--	1.03	--	--	--	0.033	6.2	50.80	97
1997/98	--	--	1.11	--	--	--	0.031	6.2	50.80	--
1998/99	--	--	1.11	--	--	--	0.031	6.5	50.70	--
1999/2000 <sup>5</sup>	--	--	1.13	--	--	--	0.030	6.5	50.60	--
<b>Soybeans<sup>8</sup></b>										
		¢/lb.					¢/lb.		Lb./acre	
1995/96	--	--	4.92	--	--	--	--	--	--	--
1996/97	--	--	4.97	--	--	--	--	--	--	--
1997/98	--	--	5.26	--	--	--	--	--	--	--
1998/99	--	--	5.26	--	--	--	--	--	--	--
1999/2000	--	--	5.26	--	--	--	--	--	--	--
<b>Upland cotton</b>										
		¢/lb.					¢/lb.		Lb./acre	
1995/96	72.90	51.92	51.92 <sup>9</sup>	0.00 <sup>7</sup>	15.50	0/0/0	--	--	--	79
1996/97	--	51.92	--	--	--	--	8.882	16.2	610.00	99
1997/98	--	51.92	--	--	--	--	7.625	16.2	608.00	--
1998/99	--	51.92	--	--	--	--	8.173	16.4	604.00	--
1999/2000 <sup>5</sup>	--	51.92	--	--	--	--	7.880	16.4	604.00	--

-- = Not available. 1. There are no Findley loan rates for rice or cotton. See footnotes 5 and 7. 2. Prior to 1996, national effective crop acreage base as determined by FSA. Net of CRP. 3. Program requirements for participating producers (mandatory acreage reduction program/mandatory paid land diversion/optional paid land diversion). Acres idled must be devoted to a conserving use to receive program benefits. 4. Percentage of effective base enrolled in acreage reduction programs. Starting in 1996, participation rate is the percent of eligible acres that entered production flexibility contracts. 5. Estimated payment rates and acres under contract. 6. A marketing loan program has been in effect for rice since 1985/86. Loans may be repaid at the lower of: a) the loan rate or b) the adjusted world market price (announced weekly). Loans cannot be repaid at less than a specified fraction of the loan rate. Data refer to marketing-year average loan repayment rates. Beginning with the 1996 crop, loans are repaid at the lower of the loan rate plus accumulated interest or the adjusted world price. 7. Guaranteed payment rates for producers in the 50/85/92 program were \$0.034/lb. for upland cotton and \$4.21/cwt. for rice. 8. There are no target prices, base acres, acreage reduction programs or deficiency payment rates for soybeans. 9. A marketing loan program has been in effect for cotton since 1986/87. In 1987/88 and after, loans may be repaid at the lower of: a) the loan rate or b) the adjusted world market price (announced weekly; Plan B). Starting in 1991/92, loans cannot be repaid at less than 70 percent of the loan rate. Data refer to annual average loan repayment rates. Beginning with the 1996 crop, loans are repaid at the lower of the loan rate plus accumulated interest or the adjusted world price. Note: The 1996 Farm Act replaced target prices and deficiency payments with fixed annual payments to producers. Information contact: Brenda Chewning, Farm Service Agency (202) 720-8838

**Table 20—Fruit**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Citrus <sup>1</sup>										
Production (1,000 tons)	10,860	11,285	12,452	15,274	14,561	15,799	15,712	17,271	17,770	13,633
Per capita consumpt. (lb.) <sup>2</sup>	21.4	19.1	24.4	26.0	25.0	24.1	25.0	27.0	27.1	20.7
Noncitrus <sup>3</sup>										
Production (1,000 tons)	15,640	15,740	17,124	16,554	17,339	16,348	16,103	18,363	16,528	17,275
Per capita consumpt. (lb.) <sup>2</sup>	70.4	70.5	73.7	73.8	75.6	73.6	73.9	73.1	76.4	81.3
	1999					2000				
	Oct	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Grower prices										
Apples (¢/pound) <sup>4</sup>	23.5	21.1	20.5	19.7	18.2	16.1	16.2	19.5	23.3	21.8
Pears (¢/pound) <sup>4</sup>	21.95	19.30	15.65	13.45	10.20	11.00	13.50	14.00	15.85	18.85
Oranges (\$/box) <sup>5</sup>	10.25	3.51	3.54	4.14	4.60	4.43	3.07	2.17	0.93	1.09
Grapefruit (\$/box) <sup>5</sup>	6.80	3.64	3.63	2.82	2.51	1.29	6.14	4.45	6.71	5.17
Stocks, ending										
Fresh apples (mil. lb.)	6,165	3,231	2,465	1,891	1,293	832	412	129	3,299	6,249
Fresh pears (mil. lb.)	515	191	133	105	70	28	40	147	532	536
Frozen fruits (mil. lb.)	1,631	1,244	1,107	1,017	1,011	1,120	1,300	1,303	1,234	1,611
Frozen conc. orange juice (mil. single-strength gallons)	482	776	769	742	802	832	752	595	550	486

-- = Not available. 1. Year shown is when harvest concluded. 2. Fresh per capita consumption. 3. Calendar year. 4. Fresh use. 5. U.S. equivalent on-tree returns. *Information contact: Susan Pollack (202) 694-5251*

**Table 21—Vegetables**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Production <sup>1</sup>										
Total vegetables (1,000 cwt)	562,938	565,754	689,070	688,824	782,505	747,988	762,952	751,739	726,310	829,731
Fresh (1,000 cwt) <sup>2,4</sup>	254,039	242,733	389,597	387,330	412,880	393,398	409,317	427,183	416,785	448,939
Processed (tons) <sup>3,4</sup>	15,444,970	16,151,030	14,973,630	15,074,707	18,481,238	17,729,497	17,681,732	16,227,819	15,476,230	19,039,620
Mushrooms (1,000 lbs) <sup>5</sup>	749,151	746,832	776,357	750,799	782,340	777,870	776,677	808,678	847,760	854,394
Potatoes (1,000 cwt)	402,110	417,622	425,367	430,349	469,425	445,099	499,254	467,091	475,771	478,216
Sweet potatoes (1,000 cwt)	12,594	11,203	12,005	11,027	13,380	12,821	13,216	13,327	12,382	12,234
Dry edible beans (1,000 cwt)	32,379	33,765	22,615	21,862	28,950	30,689	27,912	29,370	30,418	33,085
	1999					2000				
	Oct	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Shipments (1,000 cwt)										
Fresh	18,751	25,730	28,425	24,169	32,102	37,167	19,317	21,877	15,097	16,561
Iceberg lettuce	3,624	3,776	3,904	2,859	3,388	4,380	3,228	3,930	3,072	3,216
Tomatoes, all	3,469	4,463	4,553	3,845	4,020	4,272	2,497	3,095	2,473	2,684
Dry-bulb onions	4,178	3,910	3,895	3,364	3,707	3,809	3,140	4,314	3,858	3,606
Others <sup>6</sup>	7,480	13,581	16,073	14,101	20,987	24,706	10,452	10,538	5,694	7,055
Potatoes, all	12,951	17,170	19,972	20,460	16,892	15,085	9,854	12,563	11,272	10,919
Sweet potatoes	371	349	311	337	183	228	145	187	272	325

-- = Not available. 1. Calendar year except mushrooms. 2. Includes fresh production of asparagus, broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, & tomatoes through 1991. 3. Includes processing production of snap beans, sweet corn, green peas, tomatoes, cucumbers (for pickles), asparagus, broccoli, carrots, and cauliflower. 4. Data after 1991 not comparable to previous years because commodity estimates reinstated in 1992 are included. 5. Fresh and processing agaricus mushrooms only. Excludes specialty varieties. Crop year July 1- June 30. 6. Includes snap beans, broccoli, cabbage, cauliflower, celery, sweet corn, cucumbers, eggplant, bell peppers, honeydews, and watermelons.

*Information contact: Gary Lucier (202) 694-5253*

**Table 22—Other Commodities**

	Annual			1999				2000		
	1997	1998	1999	I	II	III	IV	I	II	III
Sugar										
Production <sup>1</sup>	7,418	7,891	9,083	2,636	1,031	749	4,667	2,681	922	317.8
Deliveries <sup>1</sup>	9,755	9,851	10,167	2,271	2,594	2,693	2,609	2,348	2,513	1,766
Stocks, ending <sup>1</sup>	3,377	3,423	3,855	4,219	3,184	1,639	3,855	4,551	3,498	--
Coffee										
Composite green price <sup>2</sup>										
N.Y. (¢/lb.)	146.49	114.43	88.49	94.37	90.41	77.40	91.79	85.66	75.78	66.73
	Annual			1999				2000		
	1997	1998	1999	Mar	Oct	Nov	Dec	Jan	Feb	Mar
Tobacco										
Avg. price to grower <sup>3</sup>										
Flue-cured (\$/lb.)	1.73	1.76	1.7	--	1.82	1.8	--	--	--	--
Burley (\$/lb.)	1.91	1.90	1.9	1.63	--	1.90	1.91	1.90	1.9	1.8
Domestic taxable removals										
Cigarettes (bil.)	471.4	457.9	432.6	34.9	38.8	37.6	34.0	--	--	--
Large cigars (mil.) <sup>4</sup>	3,552	3,721	3,844.0	332.7	315.6	334.7	320.0	--	--	--

-- = Not available. 1. 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2. Net imports of green and processed coffee. 3. Crop year July-June for flue-cured, October-September for burley. 4. Includes imports of large cigars. *Information contacts: sugar and coffee, Fannye Jolly (202) 694-5249; tobacco, Tom Capehart (202) 694-5245*

## World Agriculture

**Table 23—World Supply & Utilization of Major Crops, Livestock & Products**

	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00 E	2000/01 F
	<i>Million units</i>									
<b>Wheat</b>										
Area (hectares)	222.5	222.9	222.0	214.5	219.2	230.4	227.8	224.7	216.8	215.4
Production (metric tons)	542.9	562.4	558.7	524.1	538.5	582.8	609.4	588.4	587.2	580.3
Exports (metric tons) <sup>1</sup>	111.2	113.0	101.6	101.4	99.5	103.7	104.0	102.4	111.1	106.6
Consumption (metric tons) <sup>2</sup>	555.5	550.3	561.6	547.5	548.8	577.3	584.2	590.8	597.0	597.0
Ending stocks (metric tons) <sup>3</sup>	132.5	144.5	141.6	118.2	107.9	113.5	138.7	136.3	126.5	109.9
<b>Coarse grains</b>										
Area (hectares)	322.8	326.0	318.7	324.1	313.8	322.8	311.2	308.0	302.8	301.1
Production (metric tons)	810.7	871.8	798.9	871.2	802.8	908.5	884.9	889.8	876.6	859.4
Exports (metric tons) <sup>1</sup>	95.9	92.8	85.8	98.0	87.8	94.1	85.7	96.6	103.7	100.8
Consumption (metric tons) <sup>2</sup>	810.1	843.3	838.7	858.5	839.2	873.0	873.1	867.5	881.5	884.6
Ending stocks (metric tons) <sup>3</sup>	135.8	164.1	124.3	137.0	100.6	136.1	147.9	170.2	165.3	140.1
<b>Rice, milled</b>										
Area (hectares)	147.5	146.4	144.9	147.4	148.1	149.8	151.2	152.4	154.2	151.9
Production (metric tons)	354.7	355.7	355.4	364.5	371.4	380.4	386.8	394.2	404.9	400.6
Exports (metric tons) <sup>1</sup>	14.3	15.0	16.3	20.8	19.7	18.8	27.3	25.1	23.0	23.3
Consumption (metric tons) <sup>2</sup>	356.7	357.7	358.2	366.6	371.4	379.6	383.3	388.6	400.5	402.7
Ending stocks (metric tons) <sup>3</sup>	57.2	55.2	52.5	50.4	50.4	51.2	54.7	60.3	64.7	62.7
<b>Total grains</b>										
Area (hectares)	692.8	695.3	685.6	686.0	681.1	703.0	690.2	685.1	673.8	668.4
Production (metric tons)	1,708.3	1,789.9	1,713.0	1,759.8	1,712.7	1,871.7	1,881.1	1,872.4	1,868.7	1,840.3
Exports (metric tons) <sup>1</sup>	221.4	220.8	203.7	220.2	207.0	216.6	217.0	224.1	237.8	230.7
Consumption (metric tons) <sup>2</sup>	1,722.3	1,751.3	1,758.5	1,772.6	1,759.4	1,829.9	1,840.6	1,846.9	1,879.0	1,884.3
Ending stocks (metric tons) <sup>3</sup>	325.5	363.8	318.4	305.6	258.9	300.8	341.3	366.8	356.5	312.7
<b>Oilseeds</b>										
Crush (metric tons)	185.1	184.4	190.1	208.1	217.5	217.7	225.9	240.9	248.4	249.6
Production (metric tons)	224.3	227.5	229.4	261.9	258.9	261.4	286.6	294.1	300.1	302.5
Exports (metric tons)	37.6	38.2	38.7	44.1	44.3	49.6	54.0	54.6	64.5	60.8
Ending stocks (metric tons)	21.9	23.6	20.3	27.2	22.2	18.0	27.9	30.4	29.6	28.4
<b>Meals</b>										
Production (metric tons)	125.2	125.2	131.7	142.1	147.3	148.4	153.5	164.9	169.9	171.9
Exports (metric tons)	42.2	40.8	44.9	46.7	49.8	50.7	51.9	53.9	55.0	55.2
<b>Oils</b>										
Production (metric tons)	60.6	61.1	63.7	69.6	73.1	74.1	75.0	80.7	84.7	85.9
Exports (metric tons)	21.3	21.3	24.3	27.1	26.0	28.2	29.7	31.4	32.4	32.7
<b>Cotton</b>										
Area (hectares)	34.8	32.6	30.7	32.2	35.9	33.8	33.7	33.0	32.3	32.4
Production (bales)	95.8	82.5	77.1	86.0	93.1	89.6	91.6	84.7	87.1	86.7
Exports (bales)	28.5	25.5	26.8	28.4	27.8	26.9	26.7	23.7	27.2	26.7
Consumption (bales)	86.1	85.9	85.4	84.7	86.0	88.0	87.2	85.1	91.3	92.5
Ending stocks (bales)	37.4	34.7	26.8	29.8	36.6	40.1	43.7	45.1	40.6	35.1
	1991	1992	1993	1994	1995	1996	1997	1998	1999 F	2000 F
<b>Beef and Pork<sup>4</sup></b>										
Production (metric tons)	117.7	117.3	119.3	124.6	129.5	123.6	129.5	134.5	136.4	137.8
Consumption (metric tons)	116.1	115.7	118.3	123.6	127.7	120.7	126.7	131.7	134.2	135.6
Exports (metric tons) <sup>1</sup>	7.5	7.4	7.4	8.1	8.2	8.5	9.0	8.9	9.6	9.6
<b>Poultry<sup>4</sup></b>										
Production (metric tons)	39.6	38.0	40.5	43.2	47.5	50.4	52.7	53.5	55.9	57.9
Consumption (metric tons)	38.4	37.0	39.4	42.0	47.0	49.7	51.9	52.5	55.0	57.1
Exports (metric tons) <sup>1</sup>	2.8	2.4	2.8	3.6	4.5	5.1	5.6	5.7	6.0	6.4
<b>Dairy</b>										
Milk production (metric tons) <sup>5</sup>	377.6	378.4	377.6	378.4	380.7	379.8	380.8	383.1	385.8	390.5

-- = Not available. E = Estimated, F = forecast. 1. Excludes intra-EU trade but includes intra-FSU trade. 2. Where stocks data are not available, consumption includes stock changes. 3. Stocks data are based on differing marketing years and do not represent levels at a given date. Data not available for all countries. 4. Calendar year data, selected countries. 5. Data prior to 1989 no longer comparable.

Information contacts: Crops, Ed Allen (202) 694-5288; red meat and poultry, Leland Southard (202) 694-5187; dairy, LaVerne Williams (202) 694-5190

## U.S. Agricultural Trade

**Table 24—Prices of Principal U.S. Agricultural Trade Products**

	Annual			1999		2000				
	1997	1998	1999	Nov	Jun	Jul	Aug	Sep	Oct	Nov
<b>Export commodities</b>										
Wheat, f.o.b. vessel, Gulf ports (\$/bu.)	4.35	3.44	3.04	2.96	3.15	3.12	3.05	3.31	3.56	3.52
Corn, f.o.b. vessel, Gulf ports (\$/bu.)	2.98	2.59	2.30	2.17	2.12	1.91	1.91	2.05	2.16	2.26
Grain sorghum, f.o.b. vessel, Gulf ports (\$/bu.)	2.89	2.54	2.15	2.02	2.01	1.72	1.87	2.01	2.22	2.44
Soybeans, f.o.b. vessel, Gulf ports (\$/bu.)	7.94	6.37	5.02	4.90	5.37	5.02	4.93	5.19	4.94	5.06
Soybean oil, Decatur (¢/lb.)	23.33	25.78	17.51	15.63	15.65	14.70	14.34	14.24	13.51	13.37
Soybean meal, Decatur (\$/ton)	266.70	162.74	141.52	154.70	177.45	163.38	157.48	174.60	171.52	179.95
Cotton, 7-market avg. spot (¢/lb.)	69.62	67.04	52.30	48.12	54.97	55.12	59.33	60.62	60.52	62.16
Tobacco, avg. price at auction (¢/lb.)	182.74	179.77	177.82	182.50	--	--	169.51	182.97	181.01	117.45
Rice, f.o.b., mill, Houston (\$/cwt)	20.88	18.95	16.99	15.80	14.38	14.53	14.50	14.56	14.95	15.00
Inedible tallow, Chicago (¢/lb.)	20.75	17.67	12.99	14.50	10.00	9.00	9.00	9.35	10.00	9.50
<b>Import commodities</b>										
Coffee, N.Y. spot (\$/lb.)	2.05	1.39	1.05	1.14	0.90	0.93	0.80	0.82	0.81	0.72
Rubber, N.Y. spot (¢/lb.)	55.40	40.57	36.66	42.63	37.07	36.65	37.82	37.35	37.60	37.04
Cocoa beans, N.Y. (\$/lb.)	0.69	0.72	0.47	0.38	0.38	0.38	0.35	0.36	0.36	0.33

-- = Not available. Information contacts: Jenny Gonzales (202) 694-5296, Mae Dean Johnson (202) 694-5299.

**Table 25—Trade Balance**

	Fiscal Year			1999			2000			
	1999	2000	2001 P	Oct	May	Jun	Jul	Aug	Sep	Oct
\$ million										
<b>Exports</b>										
Agricultural	49,148	50,936	53,000	4,587	4,020	4,056	3,832	4,259	4,085	4,987
Nonagricultural	586,606	647,359		52,746	54,237	58,185	50,743	57,735	56,330	59,241
Total <sup>1</sup>	635,754	698,295		57,333	58,257	62,241	54,575	61,994	60,415	64,228
<b>Imports</b>										
Agricultural	37,310	38,923	40,000	3,079	3,503	3,299	2,991	3,166	2,922	3,217
Nonagricultural	938,948	1,132,257		90,668	96,443	99,828	97,043	103,988	102,722	108,266
Total <sup>2</sup>	976,258	1,171,180		93,747	99,946	103,127	100,034	107,154	105,644	111,483
<b>Trade Balance</b>										
Agricultural	11,838	12,013	13,000	1,508	517	757	841	1,093	1,163	1,770
Nonagricultural	-352,342	-484,898		-37,922	-42,206	-41,643	-46,300	-46,253	-46,392	-49,025
Total	-340,504	-472,885		-36,414	-41,689	-40,886	-45,459	-45,160	-45,229	-47,255

P = Projected. -- = Not available. Fiscal year (Oct. 1-Sep. 30). 1. Domestic exports including Department of Defense shipments (f.a.s. value).

2. Imports for consumption (customs value). Information contact: Mary Fant (202) 694-5272

**Table 26—Indexes of Real Trade-Weighted Dollar Exchange Rates<sup>1</sup>**

	Annual		1999		2000					
	1997	1998	1999	Nov	Jun	Jul	Aug	Sep	Oct	Nov
	<i>1995 = 100</i>									
Total U.S. Trade	105.5	112.4	110.9	113.9	118.4	117.5	118.2	118.2	120.3	122.3
<b>U.S. markets</b>										
All agricultural trade	103.7	111.4	109.2	116.2	118.9	118.3	119.4	118.9	120.7	122.7
Bulk commodities	107.1	115.9	112.7	115.6	119.4	119.1	120.2	119.6	121.4	123.5
Corn	110.8	121.9	115.8	113.2	116.5	116.7	118.0	116.8	118.0	119.7
Cotton	99.3	112.6	110.1	113.3	117.0	117.3	118.3	116.7	118.4	120.3
Rice	106.2	109.4	108.6	112.7	116.8	116.2	117.3	117.1	118.9	120.5
Soybeans	111.9	121.2	118.1	118.6	126.5	125.1	126.1	126.6	129.2	131.6
Tobacco, raw	117.4	125.5	124.2	124.4	133.9	131.6	134.2	135.4	138.3	140.8
Wheat	102.0	107.1	110.7	113.9	116.6	116.7	117.9	117.6	118.8	121.2
High-value products	106.6	113.0	108.0	116.8	118.5	117.7	118.8	118.2	120.1	122.0
Processed intermediates	106.3	113.2	110.5	114.7	119.0	118.1	118.9	119.0	121.0	123.0
Soymeal	99.1	104.3	103.5	108.4	110.9	110.6	111.5	111.4	113.3	115.4
Soyoil	88.1	87.9	96.2	101.7	104.2	104.4	104.6	104.9	105.8	106.6
Produce and horticulture	109.6	116.8	114.5	116.2	121.7	120.4	121.8	121.7	124.1	126.1
Fruits	109.2	118.9	114.3	114.5	118.3	118.0	119.5	118.4	120.4	122.2
Vegetables	107.3	115.1	112.5	111.6	114.6	113.5	114.6	113.4	115.7	117.3
High-value processed	105.8	111.5	103.8	118.7	117.0	116.5	117.7	116.4	118.1	119.8
Fruit juices	112.6	121.0	117.3	118.1	123.1	121.5	123.4	122.9	125.2	127.1
Poultry	79.6	74.0	61.9	158.0	118.0	117.4	116.3	115.4	116.0	117.0
Red meats	120.5	131.6	118.9	116.7	120.1	119.8	122.8	120.1	121.9	123.6
<b>U.S. competitors</b>										
All agricultural trade	108.3	114.2	115.5	125.6	135.9	132.7	134.2	136.9	140.6	143.3
Bulk commodities	101.5	110.1	109.7	133.9	133.6	131.9	133.2	133.9	136.8	139.3
Corn	108.7	111.3	113.9	123.9	134.3	130.9	132.2	135.3	138.7	141.1
Cotton	105.0	116.0	115.8	132.1	133.7	130.8	132.0	134.5	137.3	139.6
Rice	108.9	123.6	119.3	123.6	128.9	127.9	131.3	131.7	134.7	138.9
Soybeans	93.6	91.7	93.2	136.6	135.2	134.6	133.7	133.5	135.3	137.1
Tobacco, raw	100.3	105.1	104.6	124.5	120.8	118.6	118.2	123.3	124.9	126.3
Wheat	109.5	114.2	116.4	120.6	130.5	127.0	128.6	130.7	134.8	138.1
High-value products	109.6	115.3	116.5	129.1	139.8	135.9	137.4	140.5	144.7	147.7
Processed intermediates	107.2	114.5	115.6	130.7	138.6	135.6	137.0	139.1	142.9	145.8
Soymeal	97.1	95.1	96.1	135.7	137.5	136.1	135.5	136.3	138.7	140.9
Soyoil	99.0	98.3	99.4	127.1	130.5	129.3	129.5	130.7	132.4	134.3
Produce and horticulture	108.3	113.3	115.0	123.9	133.7	130.6	131.8	134.4	138.0	140.4
Fruits	110.0	125.1	122.3	127.5	134.4	132.8	135.6	136.5	140.0	143.1
Vegetables	100.6	102.2	105.0	112.9	122.3	119.8	120.4	122.7	125.9	127.9
High-value processed	111.4	116.4	117.5	129.7	142.3	137.7	139.4	143.2	147.8	151.0
Fruit juices	111.4	117.1	118.1	126.0	137.3	133.7	135.4	138.3	142.1	145.2
Poultry	104.0	106.9	107.7	126.3	135.1	132.2	133.8	136.3	139.5	142.4
Red meats	109.7	114.5	116.2	125.6	138.6	134.3	136.1	139.6	144.4	147.7
<b>U.S. suppliers</b>										
All agricultural trade	101.2	109.6	109.3	115.2	120.0	119.3	119.6	119.7	122.5	124.5
High-value products	101.3	107.2	107.9	113.3	118.5	117.4	117.5	118.2	121.1	123.2
Processed intermediates	102.5	110.3	110.3	116.1	121.6	120.2	120.8	121.4	124.5	127.1
Grains and feeds	105.1	112.5	112.9	113.4	118.3	116.6	117.5	117.6	120.5	122.6
Vegetable oils	106.4	122.4	119.3	122.6	130.0	128.4	130.1	130.5	133.9	137.9
Produce and horticulture	93.7	97.6	99.1	102.8	103.6	104.7	103.3	102.9	104.3	105.3
Fruits	91.7	95.7	96.0	98.1	97.4	99.6	98.6	98.2	99.9	101.5
Vegetables	86.3	88.7	84.0	81.7	82.1	84.1	80.8	79.7	81.2	82.7
High-value processed	104.3	110.0	110.9	116.6	124.1	122.0	122.7	124.0	127.6	130.1
Cocoa and products	105.5	117.8	119.7	131.0	137.4	135.9	137.2	136.8	139.6	141.7
Coffee and products	93.1	97.0	100.0	114.9	115.2	116.2	115.3	114.9	116.5	117.3
Dairy products	106.5	111.7	112.0	126.2	138.5	134.2	136.2	140.7	145.7	148.4
Fruit juices	99.1	100.9	101.5	125.6	127.9	127.3	127.2	127.7	130.2	133.1
Meats	95.9	102.1	105.4	107.8	110.1	109.8	110.0	109.7	110.0	111.2

Real indexes adjust nominal exchange rates for relative rates of inflation among countries. A higher value means the dollar has appreciated.

The weights used for "total U.S. trade" index are based on U.S. total merchandise exports to the largest 85 trading partners. Weights are based on relative importance of major U.S. customers, competitors in world markets, and suppliers to the U.S. Indexes are subject to revision for up to 1 year due to delayed reporting by some countries. High-value products are total agricultural products minus bulk commodities.

Source: Nominal exchange rates are obtained from the IMF International Financial Statistics. Exchange rates for the EU-11 are obtained from the Board of Governors of the Federal Reserve System. Full historical series are available back to January 1970 at

<http://usda.mannlib.cornell.edu/data-sets/international/88021/>

1. A major revision to the weighting scheme and commodity definitions was completed in May 2000. This significantly altered the series from previous versions.

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Table 27—U.S. Agricultural Exports &amp; Imports

	Fiscal Year			Oct		Fiscal Year			Oct	
	1999	2000	2001 F	1999	2000	1999	2000	2001 F	1999	2000
	1,000 units					\$ million				
<b>Exports</b>										
Animals, live	--	--	--	--	--	476	608	--	108	253
Meats and preps., excl. poultry (mt) <sup>1</sup>	2,089	2,457	1,800	219	190	4,500	5,480	5,200	479	404
Dairy products	--	--	--	--	--	914	996	900	93	112
Poultry meats (mt)	2,402	2,845	2,800	279	279	1,750	1,961	1,900	191	195
Fats, oils, and greases (mt)	1,387	1,206	1,200	103	113	544	421	--	38	31
Hides and skins, incl. furskins	--	--	--	--	--	1,108	1,479	1,500	97	140
Cattle hides, whole (no.)	17,845	21,837	--	1,615	1,698	844	1,166	--	79	102
Mink pelts (no.)	4,172	4,352	--	126	166	98	111	--	4	6
Grains and feeds (mt) <sup>2</sup>	104,576	104,009	--	9,193	8,608	14,272	13,788	14,600	1,224	1,142
Wheat (mt) <sup>3</sup>	28,806	27,779	28,700	2,608	2,248	3,648	3,378	3,800	319	267
Wheat flour (mt)	958	825	800	92	83	177	132	--	14	16
Rice (mt)	3,076	3,299	3,100	328	229	1,010	903	800	98	62
Feed grains, incl. products (mt) <sup>4</sup>	58,398	57,195	62,800	5,026	4,730	5,821	5,483	5,800	466	431
Feeds and fodders (mt)	11,800	13,386	13,000	1,004	1,201	2,252	2,496	2,500	200	239
Other grain products (mt)	1,538	1,525	--	136	122	1,363	1,397	--	128	127
Fruits, nuts, and preps. (mt)	3,439	3,736	--	286	382	3,805	3,871	4,600	339	488
Fruit juices, incl.										
froz. (1,000 hectoliters)	12,317	11,902	--	983	893	735	716	--	59	57
Vegetables and preps.	--	--	--	--	--	4,245	4,443	3,000	387	393
Tobacco, unmanufactured (mt)	205	180	200	14	9	1,376	1,229	1,200	116	66
Cotton, excl. linters (mt) <sup>5</sup>	884	1,474	1,700	36	83	1,309	1,809	2,400	48	112
Seeds (mt)	579	730	--	37	57	800	787	800	59	66
Sugar, cane or beet (mt)	158	115	--	14	6	56	40	--	5	3
Oilseeds and products (mt)	33,597	36,055	36,700	3,964	4,602	8,638	8,386	9,000	905	1,027
Oilseeds (mt)	--	--	--	--	--	--	--	--	--	--
Soybeans (mt)	22,974	26,038	26,400	2,913	3,788	4,748	5,070	5,400	559	701
Protein meal (mt)	6,726	6,670	--	706	580	1,101	1,259	--	129	114
Vegetable oils (mt)	2,669	2,130	--	251	135	1,846	1,346	--	157	86
Essential oils (mt)	47	53	--	4	4	507	593	--	52	49
Other	--	--	--	--	--	4,112	4,330	--	388	450
Total	--	--	--	--	--	49,148	50,936	53,000	4,587	4,987
<b>Imports</b>										
Animals, live	--	--	--	--	--	1,411	1,737	1,800	160	205
Meats and preps., excl. poultry (mt)	1,403	1,555	1,500	128	121	3,108	3,722	3,900	298	297
Beef and veal (mt)	943	1,027	--	85	74	2,047	2,405	--	198	175
Pork (mt)	337	402	--	34	36	721	958	--	72	87
Dairy products	--	--	--	--	--	1,572	1,635	1,500	145	144
Poultry and products	--	--	--	--	--	201	288	--	16	24
Fats, oils, and greases (mt)	85	107	--	11	7	56	71	--	7	5
Hides and skins, incl. furskins (mt)	--	--	--	--	--	146	160	--	10	10
Wool, unmanufactured (mt)	29	25	--	2	2	75	66	--	6	5
Grains and feeds	--	--	--	--	--	2,943	3,059	3,000	288	304
Fruits, nuts, and preps.,										
excl. juices (mt) <sup>6</sup>	8,171	8,366	8,600	614	580	4,619	4,546	5,500	309	309
Bananas and plantains (mt)	4,418	4,396	4,500	401	365	1,212	1,128	1,200	96	99
Fruit juices (1,000 hectoliters)	31,655	32,199	33,000	2,341	2,670	772	783	--	55	62
Vegetables and preps.	--	--	--	--	--	4,527	4,657	4,800	335	371
Tobacco, unmanufactured (mt)	217	220	200	11	14	742	651	700	25	32
Cotton, unmanufactured (mt)	144	34	--	2	6	150	28	--	1	3
Seeds (mt)	357	448	--	13	27	457	493	--	30	33
Nursery stock and cut flowers	--	--	--	--	--	1,076	1,165	1,200	98	90
Sugar, cane or beet (mt)	1,692	1,379	--	68	140	606	493	--	24	47
Oilseeds and products (mt)	3,767	4,069	4,100	284	356	1,899	1,873	1,900	136	157
Oilseeds (mt)	1,000	1,103	--	56	55	326	310	--	18	15
Protein meal (mt)	1,131	1,194	--	97	104	147	150	--	12	13
Vegetable oils (mt)	1,637	1,772	--	131	198	1,427	1,413	--	106	129
Beverages, excl. fruit										
juices (1,000 hectoliters)	--	--	--	--	--	4,258	4,702	--	447	454
Coffee, tea, cocoa, spices (mt)	2,520	2,841	--	194	202	5,306	5,218	--	380	347
Coffee, incl. products (mt)	1,294	1,411	1,400	95	95	2,967	2,905	3,000	187	151
Cocoa beans and products (mt)	865	1,046	1,100	67	76	1,531	1,466	1,500	119	122
Rubber and allied gums (mt)	1,148	1,249	1,300	130	100	739	841	900	77	65
Other	--	--	--	--	--	2,646	2,735	--	231	252
Total	--	--	--	--	--	37,310	38,923	40,000	3,079	3,217

F = Forecast. -- = Not available. Projections are fiscal years (Oct. 1 through Sept. 30) and are from Outlook for U.S. Agricultural Exports.

1999 and 2000 data are from *Foreign Agricultural Trade of the U.S.* 1. Projection includes beef, pork, and variety meat. 2. Projection includes pulses. 3. Value projection includes wheat flour. 4. Projection excludes grain products. 5. Projection includes linters. 6. Value projection includes juice.

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Table 28—U.S. Agricultural Exports by Region

Region & country	Fiscal year			1999		2000				
	1999	2000	2001 F	Oct	May	Jun	Jul	Aug	Sep	Oct
	\$ millions									
<b>Western Europe</b>	7,528	6,712	6,600	656	438	424	391	470	454	795
European Union <sup>1</sup>	6,958	6,373	6,300	639	413	409	372	425	419	710
Belgium-Luxembourg	602	538	--	61	41	37	31	38	43	53
France	377	348	--	30	23	18	30	26	19	29
Germany	1,057	947	--	90	56	40	49	74	74	97
Italy	574	560	--	36	37	53	36	29	30	44
Netherlands	1,587	1,459	--	140	78	68	81	84	81	155
United Kingdom	1,122	1,033	--	106	87	75	82	79	91	144
Portugal	131	145	--	12	11	4	7	11	5	11
Spain, incl. Canary Islands	784	664	--	92	28	42	20	28	24	87
Other Western Europe	570	340	300	17	25	15	19	45	35	84
Switzerland	455	250	--	8	16	9	10	36	27	75
<b>Eastern Europe</b>	190	167	200	17	12	17	11	17	11	17
Poland	73	47	--	3	3	5	7	6	3	6
Former Yugoslavia	47	67	--	10	5	8	2	4	4	3
Romania	18	12	--	1	1	1	1	3	1	3
<b>Newly Independent States</b>	881	934	800	165	71	56	39	56	72	100
Russia	532	671	600	135	59	45	27	47	41	76
<b>Asia<sup>2</sup></b>	20,441	22,051	21,200	1,877	1,833	1,856	1,654	1,814	1,701	1,964
West Asia (Mideast)	1,978	2,363	2,400	241	171	184	175	215	215	254
Turkey	448	701	800	65	48	51	65	42	35	30
Iraq	9	8	--	--	--	--	--	8	--	--
Israel, incl. Gaza and W. Bank	417	458	--	35	45	47	30	43	41	39
Saudi Arabia	468	462	500	59	35	38	36	52	47	46
South Asia	499	416	400	58	36	34	28	29	40	49
Bangladesh	165	82	--	6	6	4	12	5	4	6
India	189	186	--	10	11	19	10	16	24	23
Pakistan	89	93	--	37	9	5	5	3	6	8
China	1,011	1,474	1,600	98	80	141	120	167	88	200
Japan	8,933	9,353	9,800	749	878	816	688	698	679	709
Southeast Asia	2,218	2,602	2,900	248	169	194	198	208	241	270
Indonesia	499	681	800	56	28	44	79	58	64	84
Philippines	735	866	900	67	73	73	56	70	76	78
Other East Asia	5,803	5,844	6,500	482	499	487	445	497	437	482
Korea, Rep.	2,482	2,569	3,100	213	216	203	202	233	200	183
Hong Kong	1,264	1,255	1,300	112	96	117	88	117	103	118
Taiwan	2,047	2,011	2,100	157	188	167	155	146	135	175
<b>Africa</b>	2,160	2,272	2,300	214	126	206	202	246	255	253
North Africa	1,468	1,565	1,500	158	82	136	132	180	189	190
Morocco	162	141	--	12	11	11	8	9	19	30
Algeria	223	255	--	8	22	27	27	36	22	21
Egypt	1,002	1,094	1,000	130	40	97	90	127	140	134
Sub-Sahara	693	707	700	57	44	70	70	66	66	63
Nigeria	176	160	--	13	12	12	21	19	14	17
S. Africa	165	164	--	20	11	12	15	8	17	9
<b>Latin America and Caribbean</b>	10,495	10,639	11,200	955	835	770	874	958	904	989
Brazil	366	253	300	18	21	18	16	23	14	18
Caribbean Islands	1,453	1,457	--	146	108	121	112	110	111	130
Central America	1,209	1,129	--	97	86	80	97	109	97	89
Colombia	468	427	--	37	38	42	41	35	22	39
Mexico	5,672	6,329	6,800	566	517	439	531	599	575	634
Peru	347	201	--	19	5	13	19	11	14	8
Venezuela	458	404	400	31	32	27	30	37	37	42
<b>Canada</b>	6,951	7,520	7,800	657	654	671	604	618	623	726
<b>Oceania</b>	502	490	500	47	31	39	39	51	41	49
<b>Total</b>	49,148	50,936	53,000	4,587	4,020	4,056	3,832	4,259	4,085	4,987

F = Forecast. -- = Not available. Based on fiscal year beginning October 1 and ending September 30. 1. Austria, Finland, and Sweden are included in the European Union. 2. Asia forecasts exclude West Asia (Mideast). NOTE: Adjusted for transshipments through Canada for 1998 and 1999 through December 1999, but transshipments are not distributed by country as previously for 2000. *Information contact: Mary Fant (202) 694-5272*

## Farm Income

**Table 29—Value Added to the U.S. Economy by the Agricultural Sector**

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
	<i>\$ billion</i>									
Final crop output	81.0	88.9	82.4	100.3	95.7	115.6	112.3	102.1	93.1	95.5
Food grains	7.3	8.5	8.2	9.5	10.4	10.8	10.4	8.9	7.3	6.8
Feed crops	19.3	20.1	20.2	20.3	24.5	27.2	27.0	22.7	19.8	20.7
Cotton	5.2	5.2	5.2	6.7	6.9	7.0	6.3	6.1	4.7	4.9
Oil crops	12.7	13.3	13.2	14.7	15.5	16.4	19.8	17.5	13.6	14.3
Tobacco	2.9	3.0	2.9	2.7	2.5	2.8	2.9	2.8	2.3	1.8
Fruits and tree nuts	9.9	10.1	10.3	10.3	11.1	11.9	13.1	12.2	13.0	11.5
Vegetables	11.6	11.8	13.7	14.0	15.0	14.4	14.7	15.1	15.2	15.9
All other crops	13.1	13.7	13.7	14.7	15.0	15.8	16.9	17.1	17.4	17.9
Home consumption	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Value of inventory adjustment <sup>1</sup>	-1.2	3.2	-5.3	7.2	-5.3	9.1	1.1	-0.5	-0.2	1.2
Final animal output	87.3	87.1	92.0	89.7	87.7	92.0	96.5	94.2	95.1	99.8
Meat animals	50.1	47.7	51.0	46.7	44.9	44.2	49.7	43.3	45.6	51.9
Dairy products	18.0	19.7	19.3	20.0	19.9	22.8	20.9	24.1	23.2	21.3
Poultry and eggs	15.2	15.5	17.4	18.5	19.1	22.5	22.3	22.9	22.9	23.5
Miscellaneous livestock	2.5	2.6	2.9	3.1	3.3	3.4	3.6	3.7	3.7	3.6
Home consumption	0.5	0.5	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.4
Value of inventory adjustment <sup>1</sup>	1.0	1.0	1.1	1.1	0.2	-1.1	-0.4	-0.3	-0.7	-0.9
Services and forestry	15.4	15.2	17.0	18.1	19.9	20.8	22.1	24.7	26.7	26.9
Machine hire and customwork	1.8	1.8	1.9	2.1	1.9	2.2	2.4	2.2	2.0	2.2
Forest products sold	1.8	2.2	2.5	2.6	2.8	2.6	2.8	3.0	2.9	2.9
Other farm income	4.7	4.1	4.6	4.3	5.8	6.2	6.9	8.7	10.8	10.8
Gross imputed rental value of farm dwellings	7.2	7.2	8.1	9.0	9.4	9.9	10.1	10.8	10.9	11.0
<b>Final agricultural sector output<sup>2</sup></b>	<b>183.7</b>	<b>191.3</b>	<b>191.3</b>	<b>208.0</b>	<b>203.4</b>	<b>228.4</b>	<b>230.9</b>	<b>221.0</b>	<b>214.9</b>	<b>222.2</b>
<i>Minus</i> Intermediate consumption outlays:	94.6	93.4	100.7	104.9	109.7	113.2	121.0	118.5	120.8	126.7
Farm origin	38.6	38.6	41.3	41.3	41.8	42.7	46.8	44.8	45.5	47.2
Feed purchased	19.3	20.1	21.4	22.6	23.8	25.2	26.3	25.0	24.5	24.8
Livestock and poultry purchased	14.1	13.6	14.7	13.3	12.5	11.3	13.8	12.5	13.8	15.0
Seed purchased	5.1	4.9	5.2	5.4	5.5	6.2	6.7	7.2	7.2	7.4
Manufactured inputs	23.2	22.7	23.1	24.4	26.1	28.6	29.2	28.2	27.3	30.2
Fertilizers and lime	8.7	8.3	8.4	9.2	10.0	10.9	10.9	10.6	9.9	10.3
Pesticides	6.3	6.5	6.7	7.2	7.7	8.5	9.0	9.0	8.6	8.7
Petroleum fuel and oils	5.6	5.3	5.4	5.3	5.4	6.0	6.2	5.6	5.8	8.2
Electricity	2.6	2.6	2.7	2.7	3.0	3.2	3.0	2.9	3.0	3.1
Other intermediate expenses	32.8	32.1	36.2	39.2	41.7	41.9	44.9	45.6	48.0	49.3
Repair and maintenance of capital items	8.6	8.5	9.2	9.1	9.5	10.3	10.4	10.4	10.5	10.7
Machine hire and customwork	3.5	3.8	4.4	4.8	4.8	4.7	4.9	5.4	5.3	5.5
Marketing, storage, and transportation	4.7	4.5	5.6	6.8	7.2	6.9	7.1	6.9	7.3	7.8
Contract labor	1.6	1.7	1.8	1.8	2.0	2.1	2.6	2.4	2.6	2.7
Miscellaneous expenses	14.3	13.6	15.2	16.7	18.3	17.8	19.9	20.6	22.3	22.6
<i>Plus</i> Net government transactions:	2.1	2.7	6.9	1.1	0.2	0.2	0.2	4.8	13.1	15.7
+ Direct government payments	8.2	9.2	13.4	7.9	7.3	7.3	7.5	12.2	20.6	23.3
- Motor vehicle registration and licensing fees	0.3	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.4	0.4
- Property taxes	5.8	6.1	6.2	6.4	6.6	6.7	6.8	6.9	7.1	7.2
<b>Gross value added</b>	<b>91.2</b>	<b>100.5</b>	<b>97.5</b>	<b>104.3</b>	<b>93.9</b>	<b>115.4</b>	<b>110.1</b>	<b>107.3</b>	<b>107.2</b>	<b>111.1</b>
<i>Minus</i> Capital consumption	18.2	18.3	18.3	18.7	19.2	19.4	19.6	19.7	19.9	19.8
<b>Net value added<sup>2</sup></b>	<b>73.0</b>	<b>82.2</b>	<b>79.2</b>	<b>85.6</b>	<b>74.7</b>	<b>96.0</b>	<b>90.6</b>	<b>87.5</b>	<b>87.3</b>	<b>91.3</b>
<i>Minus</i> Factor payments:	34.5	34.6	34.8	36.8	37.8	41.1	42.0	42.9	43.9	45.7
Employee compensation (total hired labor)	12.3	12.3	13.2	13.5	14.3	15.2	16.0	16.9	17.5	18.4
Net rent received by nonoperator landlords	10.1	11.2	10.9	11.8	10.9	12.9	12.8	12.7	12.9	13.3
Real estate and non-real estate interest	12.1	11.0	10.7	11.6	12.6	13.0	13.1	13.4	13.6	14.1
<b>Net farm income<sup>2</sup></b>	<b>38.5</b>	<b>47.7</b>	<b>44.3</b>	<b>48.8</b>	<b>36.9</b>	<b>54.9</b>	<b>48.6</b>	<b>44.6</b>	<b>43.4</b>	<b>45.6</b>

Values in last two columns are preliminary or forecast. 1. A positive value of inventory change represents current-year production not sold by December 31. A negative value is an offset to production from prior years included in current-year sales. 2. Final sector output is the gross value of commodities and services produced within a year. Net value added is the sector's contribution to the National economy and is the sum of income from production earned by all factors of production. Net farm income is farm operators' share of income from the sector's production activities. The concept presented is consistent with that employed by the Organization for Economic Cooperation and Development. *Information contact: Roger Strickland: rogers@ers.usda.gov*  
To confirm that this table contains the current forecast, go to <http://www.ers.usda.gov/briefing/farmincome/fore/fore.htm>

**Table 30—Farm Income Statistics**

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
	<i>\$ billion</i>									
<b>Cash income statement:</b>										
1. Cash receipts	167.9	171.3	177.9	181.1	188.0	199.1	207.6	196.6	188.6	194.5
Crops <sup>1</sup>	82.1	85.6	87.5	92.9	100.8	106.3	111.1	102.5	93.1	94.1
Livestock	85.8	85.7	90.4	88.2	87.1	92.8	96.5	94.1	95.5	100.3
2. Direct Government payments	8.2	9.2	13.4	7.9	7.3	7.3	7.5	12.2	20.6	23.3
3. Farm-related income <sup>2</sup>	8.3	8.0	9.0	9.0	10.5	10.9	12.0	13.9	15.8	15.9
4. Gross cash income (1+2+3)	184.4	188.5	200.3	198.1	205.8	217.4	227.1	222.6	225.0	233.6
5. Cash expenses <sup>3</sup>	134.1	133.5	141.2	147.4	153.2	159.8	168.6	167.2	170.4	178.3
6. Net cash income (4-5)	50.2	54.9	59.1	50.7	52.5	57.6	58.5	55.4	54.6	55.4
<b>Farm income statement:</b>										
7. Gross cash income (4)	184.4	188.5	200.3	198.1	205.8	217.4	227.1	222.6	225.0	233.6
8. Noncash income <sup>4</sup>	7.8	7.8	8.7	9.6	9.9	10.3	10.6	11.3	11.4	11.5
9. Value of inventory adjustment	-0.2	4.2	-4.2	8.3	-5.0	8.0	0.7	-0.7	-0.9	0.3
10. Gross farm income (7+8+9)	191.9	200.4	204.7	215.9	210.7	235.7	238.4	233.2	235.5	245.5
11. Total production expenses	153.4	152.8	160.4	167.1	173.8	180.8	189.8	188.6	192.1	199.8
12. Net farm income (10-11)	38.5	47.7	44.3	48.8	36.9	54.9	48.6	44.6	43.4	45.6

Values for last 2 years are preliminary or forecast. Numbers in parentheses indicate the combination of items required to calculate an item. Totals may not add due to rounding. 1. Includes commodities placed under CCC loans and profits made on loans redeemed. 2. Income from custom labor, machine hire, recreational activities, forest product sales, and other farm sources. 3. Excludes depreciation and perquisites to hired labor. Excludes farm operator dwellings. 4. Value of farm products consumed on farms where produced plus the imputed rental value of farm dwellings. *Information contact:*

Roger Strickland: rogers@ers.usda.gov

To confirm that this table contains the current forecast, go to <http://www.ers.usda.gov/briefing/farmincome/fore/fore.htm>

**Table 31—Average Income to Farm Operator Households<sup>1</sup>**

	1992	1993	1994	1995	1996	1997	1998	1999	2000
	<i>\$ per farm</i>								
Net cash farm business income <sup>2</sup>	11,320	11,248	11,389	11,218	13,502	12,676	14,357	13,194	--
Less depreciation <sup>3</sup>	5,187	6,219	6,466	6,795	6,906	6,578	7,409	7,027	--
Less wages paid to operator <sup>4</sup>	216	454	425	522	531	513	637	499	--
Less farmland rental income <sup>5</sup>	360	534	701	769	672	568	543	802	--
Less adjusted farm business income due to other household(s) <sup>6</sup>	961	872	815	649	1,094	*1,505	1,332	1,262	--
	<i>\$ per farm operator household</i>								
Equals adjusted farm business income	4,596	3,168	2,981	2,484	4,300	3,513	4,436	3,603	--
Plus wages paid to operator	216	454	425	522	531	513	637	499	--
Plus net income from farmland rental <sup>7</sup>	360	--	--	1,053	1,178	945	868	1,312	--
Equals farm self-employment income	5,172	3,623	3,407	4,059	6,009	4,971	5,941	5,415	--
Plus other farm-related earnings <sup>8</sup>	2,008	1,192	970	661	1,898	1,234	1,165	944	--
Equals earnings of the operator household from farming activities	7,180	4,815	4,376	4,720	7,906	6,205	7,106	6,359	4,552
Plus earnings of the operator household from off-farm sources <sup>9</sup>	35,731	35,408	38,092	39,671	42,455	46,358	52,628	57,988	60,058
Equals average farm operator household income	42,911	40,223	42,469	44,392	50,361	52,562	59,734	64,347	64,610
	<i>\$ per U.S. household</i>								
U.S. average household income <sup>10</sup>	38,840	41,428	43,133	44,938	47,123	49,692	51,855	--	--
	<i>Percent</i>								
Average farm operator household income as percent of U.S. average household income	110.5	97.1	98.5	98.8	106.9	105.8	115.2	--	--
Average operator household earnings from farming activities as percent of average operator household income	16.7	12.0	10.3	10.6	15.7	11.8	11.9	10	--

-- = Not available. Values in last two columns are preliminary or forecast. 1. This table derives farm operator household income estimates from the Agricultural Resource Management Study (ARMS) that are consistent with Current Population Survey (CPS) methodology. The CPS, conducted by the Bureau of the Census, is the source of official U.S. household income statistics. The CPS defines income to include any income received as cash. The CPS definition departs from a strictly cash concept by including depreciation as an expense that farm operators and other self-employed people subtract from gross receipts when reporting net cash income. 2. A component of farm-sector income. Excludes income of contractors and landlords as well as the income of farms organized as nonfamily corporations or cooperatives, and farms run by a hired manager. Includes income of farms organized as proprietorships, partnerships, and family corporations. 3. Consistent with the CPS definition of self-employed income, reported depreciation expenses are subtracted from net cash farm income. The ARMS collects data on farm business depreciation used for tax purposes. 4. Wages paid to the operator are excluded because they are not shared among other households that have claims on farm business income. These wages are added to the operator household's adjusted farm business income to obtain farm self-employment income. 5. Gross rental income is excluded because net rental income from farm operation is added below to income received by the household. 6. More than one household may have a claim on the income of a farm business. On average, 1.1 households share the income of a farm business. 7. Includes net rental income from the farm business. Also includes net rental income from farmland held by household members that is not part of the farm business. In 1991 and 1992, gross rental income from the farm business was used because net rental income data were not collected. In 1993 and 1994, net rental income data were collected as part of off-farm income. 8. Wages paid to other operator household members by the farm business, and net income from a farm business other than the one surveyed. In 1996, also includes the value of commodities provided to household members for farm work. 9. Wages, salaries, net income from nonfarm businesses, interest, dividends, transfer payments, etc. In 1993 and 1994, also includes net rental income from farmland. 10. From the CPS. Sources: U.S. Department of Agriculture, Economic Research Service, 1992, 1993, 1994, and 1995 Farm Costs and Returns Survey (FCRS), and 1996 and 1997 Agricultural Resource Management Study for farm operator household data. U.S. Department of Commerce, Bureau of the Census Current Population Survey (PCS), for average household income. *Information contact: Bob Hoppe (202) 694-5572 or rhoppe@ers.usda.gov*

**Table 32—Balance Sheet of the U.S. Farming Sector**

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
	<i>\$ billion</i>									
Farm assets	844.2	868.3	910.2	935.5	966.7	1,003.7	1,051.5	1,064.2	1,083.7	1,111.7
Real estate	624.8	640.8	677.6	704.1	740.5	769.4	808.4	822.8	846.7	872.9
Livestock and poultry <sup>1</sup>	68.1	71.0	72.8	67.9	57.8	60.3	67.1	62.0	61.3	60.4
Machinery and motor vehicles	85.9	85.4	86.5	87.5	88.5	88.9	89.0	88.6	86.9	86.3
Crops stored <sup>2,3</sup>	22.2	24.2	23.3	23.3	27.4	31.7	32.2	30.1	30.3	31.5
Purchased inputs	2.6	3.9	3.8	5.0	3.4	4.4	5.1	5.3	5.5	5.6
Financial assets	40.5	43.1	46.3	47.6	49.1	49.0	49.7	55.4	53.0	55.0
Total farm debt	139.2	139.1	142.0	146.8	150.8	156.1	165.4	172.7	176.4	176.4
Real estate debt <sup>3</sup>	74.9	75.4	76.0	77.7	79.3	81.7	85.4	89.6	94.2	95.5
Non-real estate debt <sup>4</sup>	64.3	63.6	65.9	69.1	71.5	74.4	80.1	83.1	82.2	81.0
Total farm equity	705.0	729.3	768.3	788.7	815.9	847.6	886.1	891.5	907.3	935.3
	<i>Percent</i>									
Selected ratios										
Debt to equity	19.8	19.1	18.5	18.6	18.5	18.4	18.7	19.4	19.4	18.9
Debt to assets	16.5	16.0	15.6	15.7	15.6	15.6	15.7	16.2	16.3	15.9

Values in the last two columns are preliminary or forecast. 1. As of December 31. 2. Non-CCC crops held on farms plus value above loan rates for crops held under CCC. 3. Includes CCC storage and drying facilities loans, but excludes debt on operator dwellings. 4. Excludes debt for nonfarm purposes. *Information contact: Ken Erickson (202) 694-5565 or erickson@ers.usda.gov*

To confirm that this table contains the current forecast, go to <http://www.ers.usda.gov/briefing/farmincome/fore/fore.htm>

**Table 33—Cash Receipts from Farming**

	Annual			1999		2000				
	1997	1998	1999	Sep	Apr	May	Jun	Jul	Aug	Sep
	<i>\$ million</i>									
Commodity sales <sup>1</sup>	207,596	196,575	188,610	14,479	13,291	15,180	13,671	15,016	13,945	15,083
Livestock and products	96,463	94,112	95,463	8,000	7,901	8,694	7,678	8,864	7,888	8,404
Meat animals	49,681	43,336	45,600	3,504	4,322	4,883	3,927	5,127	4,061	4,150
Dairy products	20,940	24,114	23,204	1,904	1,685	1,805	1,724	1,781	1,738	1,788
Poultry and eggs	22,260	22,942	22,942	1,941	1,668	1,762	1,803	1,725	1,826	1,815
Other	3,581	3,719	3,717	651	226	244	223	231	262	651
Crops	111,134	102,463	93,146	6,479	5,390	6,486	5,993	6,152	6,057	6,680
Food grains	10,411	8,892	7,292	987	283	458	270	278	788	1,205
Feed crops	27,048	22,666	19,752	1,264	1,441	1,643	905	959	1,303	1,245
Cotton (lint and seed)	6,345	6,101	4,696	88	235	155	61	75	98	81
Tobacco	2,874	2,803	2,273	8	106	40	9	0	0	7
Oil-bearing crops	19,802	17,483	13,555	623	754	963	625	582	713	722
Vegetables and melons	14,653	15,145	15,164	1,436	773	1,113	1,248	1,865	1,397	1,360
Fruits and tree nuts	13,134	12,238	12,975	1,100	741	582	896	898	830	1,082
Other	16,866	17,136	17,441	974	1,057	1,532	1,979	1,494	928	978
Government payments	7,495	12,209	20,594	652	1,151	946	1,058	248	700	396
Total	215,092	208,784	209,204	15,132	14,442	16,126	14,729	15,264	14,646	15,479

Annual values for the most recent year are preliminary. 1. Sales of farm products include receipts from commodities placed under nonrecourse CCC loans, plus additional gains realized on redemptions during the period. *Information contacts: Larry Traub (202) 694-5593 or ltraub@ers.usda.gov*  
To receive current monthly cash receipts via e-mail contact Larry Traub.

**Table 34—Cash Receipts from Farm Marketings, by State**

Region and State	Livestock and products				Crops <sup>1</sup>				Total <sup>1</sup>			
	1998	1999	Aug 2000	Sep 2000	1998	1999	Aug 2000	Sep 2000	1998	1999	Aug 2000	Sep 2000
	<i>\$ million</i>											
<b>North Atlantic</b>												
Maine	295	286	22	21	215	229	6	15	510	515	28	37
New Hampshire	69	63	5	5	86	90	4	6	155	153	9	11
Vermont	463	473	36	37	71	68	2	12	534	541	39	49
Massachusetts	108	101	8	8	314	295	25	28	422	396	33	36
Rhode Island	9	8	1	1	40	39	2	3	49	48	3	4
Connecticut	184	180	14	14	298	302	12	15	482	482	26	29
New York	2,092	2,043	160	162	1,055	1,054	67	118	3,146	3,097	227	279
New Jersey	219	187	11	57	609	554	53	64	828	740	65	121
Pennsylvania	2,909	2,877	215	210	1,252	1,193	78	80	4,161	4,070	293	290
<b>North Central</b>												
Ohio	1,854	1,786	151	154	3,064	2,643	155	189	4,918	4,429	306	344
Indiana	1,632	1,581	158	162	2,899	2,792	147	188	4,531	4,373	305	350
Illinois	1,574	1,524	135	146	6,448	5,233	319	378	8,022	6,757	454	524
Michigan	1,320	1,331	114	124	2,186	2,139	120	160	3,506	3,470	234	284
Wisconsin	4,491	4,149	320	317	1,610	1,447	75	109	6,101	5,596	395	425
Minnesota	3,773	3,548	317	319	4,102	3,513	220	218	7,875	7,061	537	537
Iowa	4,753	4,712	434	622	6,300	5,004	332	310	11,053	9,716	766	931
Missouri	2,469	2,477	217	195	2,285	1,779	99	146	4,754	4,256	316	341
North Dakota	555	647	36	41	2,359	2,112	126	116	2,913	2,759	162	156
South Dakota	1,549	1,830	164	161	1,855	1,709	135	167	3,404	3,539	299	328
Nebraska	5,124	5,425	450	441	3,906	3,130	187	204	9,030	8,555	637	645
Kansas	4,539	5,009	454	443	3,408	2,607	155	411	7,946	7,616	609	854
<b>Southern</b>												
Delaware	609	566	50	48	167	153	13	21	776	718	64	69
Maryland	942	937	79	76	571	544	40	60	1,513	1,481	119	136
Virginia	1,565	1,580	137	137	766	704	37	58	2,332	2,283	175	194
West Virginia	335	334	27	28	61	53	5	5	396	387	32	33
North Carolina	3,956	3,850	375	334	3,233	2,838	165	149	7,190	6,688	541	483
South Carolina	764	773	56	60	733	633	54	52	1,497	1,406	111	113
Georgia	3,400	3,334	258	266	2,017	1,907	159	98	5,418	5,241	417	364
Florida	1,390	1,363	92	102	5,573	5,702	315	222	6,963	7,066	407	323
Kentucky	2,171	2,158	88	441	1,603	1,298	41	35	3,773	3,456	129	476
Tennessee	1,039	1,011	84	81	1,166	963	51	51	2,205	1,974	135	132
Alabama	2,587	2,777	191	206	709	662	41	36	3,296	3,438	232	241
Mississippi	2,164	2,143	169	165	1,271	1,031	41	42	3,436	3,174	210	206
Arkansas	3,283	3,397	275	261	2,141	1,863	120	58	5,423	5,259	396	319
Louisiana	631	620	50	53	1,236	1,228	26	24	1,868	1,848	76	78
Oklahoma	2,803	3,135	283	275	962	855	153	139	3,765	3,991	436	414
Texas	8,149	8,480	726	741	5,005	4,572	319	394	13,154	13,052	1,045	1,135
<b>Western</b>												
Montana	883	928	65	63	924	789	50	43	1,808	1,716	115	106
Idaho	1,585	1,603	127	140	1,742	1,744	110	139	3,327	3,347	237	279
Wyoming	680	680	35	32	168	172	3	8	848	852	39	40
Colorado	2,842	3,016	260	229	1,529	1,338	80	108	4,371	4,354	340	337
New Mexico	1,420	1,441	125	126	521	513	63	65	1,941	1,953	188	191
Arizona	921	987	101	94	1,410	1,191	115	65	2,331	2,178	215	158
Utah	723	724	57	61	261	243	15	21	984	967	72	83
Nevada	199	216	17	15	149	118	9	14	348	334	26	29
Washington	1,743	1,658	132	130	3,413	3,275	230	278	5,156	4,933	362	408
Oregon	762	790	67	67	2,199	2,262	150	197	2,961	3,052	217	264
California	6,526	6,714	527	526	18,145	18,087	1,293	1,321	24,671	24,801	1,819	1,847
Alaska	27	29	2	2	18	19	2	2	44	48	4	5
Hawaii	90	86	8	7	423	447	36	38	514	533	44	45
<b>U.S.</b>	94,112	95,463	7,888	8,404	102,463	93,146	6,057	6,680	196,575	188,610	13,945	15,083

Annual values for the most recent year are preliminary. Estimates as of end of current month. Totals may not add because of rounding. 1. Sales of farm products include receipts from commodities placed under nonrecourse CCC loans, plus additional gains realized on redemptions during the period.

Information contact: Larry Traub (202) 694-5593 or ltraub@ers.usda.gov. To receive current monthly cash receipts via e-mail, contact Larry Traub.

Table 35—CCC Net Outlays by Commodity &amp; Function

	Fiscal year									
	1992	1993	1994	1995	1996	1997	1998	1999	2000 E	2001 E
	\$ million									
<b>Commodity/Program</b>										
Feed grains:										
Corn	2,105	5,143	625	2,090	2,021	2,587	2,873	5,402	9,696	3,712
Grain sorghum	190	410	130	153	261	284	296	502	942	252
Barley	174	186	202	129	114	109	168	224	393	128
Oats	32	16	5	19	8	8	17	41	63	55
Corn and oat products	9	10	10	1	0	0	0	0	1	0
Total feed grains	2,510	5,765	972	2,392	2,404	2,988	3,354	6,169	11,095	4,147
Wheat and products	1,719	2,185	1,729	803	1,491	1,332	2,187	3,435	5,417	1,688
Rice	715	887	836	814	499	459	491	911	1,729	769
Upland cotton	1,443	2,239	1,539	99	685	561	1,132	1,882	4,206	1,700
Tobacco	29	235	693	-298	-496	-156	376	113	301	25
Dairy	232	253	158	4	-98	67	291	480	685	149
Soybeans	-29	109	-183	77	-65	5	139	1,289	2,725	3,325
Peanuts	41	-13	37	120	100	6	-11	21	42	60
Sugar	-19	-35	-24	-3	-63	-34	-30	-51	141	90
Honey	17	22	0	-9	-14	-2	0	2	1	3
Wool and mohair	191	179	211	108	55	0	0	10	7	-6
Operating expense <sup>1</sup>	6	6	6	6	6	6	5	4	60	5
Interest expenditure	532	129	-17	-1	140	-111	76	210	626	707
Export programs <sup>2</sup>	1,459	2,193	1,950	1,361	-422	125	212	165	329	691
1988-2000 Disaster/tree/ livestock assistance	1,054	944	2,566	660	95	130	3	2,241	1,549	26
Conservation Reserve Program	0	0	0	0	2	1,671	1,693	1,462	1,587	1,657
Other conservation programs	0	0	0	0	7	105	197	292	382	355
Other	-162	949	-137	-103	320	104	28	588	1,459	1,004
Total	9,738	16,047	10,336	6,030	4,646	7,256	10,143	19,223	32,341	16,395
<b>Function</b>										
Price support loans (net)	584	2,065	527	-119	-951	110	1,128	1,455	1,947	1,248
Cash direct payments: <sup>3</sup>										
Production flexibility contract	0	0	0	0	5,141	6,320	5,672	5,476	5,049	4,057
Market loss assistance	0	0	0	0	0	0	0	3,011	11,054	0
Deficiency	5,491	8,607	4,391	4,008	567	-1,118	-7	-3	0	0
Dairy termination	2	0	0	0	0	0	0	0	0	0
Loan deficiency	214	387	495	29	0	0	478	3,360	6,387	5,259
Oilseed	0	0	0	0	0	0	0	0	463	500
Cotton user marketing	140	114	149	88	34	6	416	280	491	355
Other	0	35	22	9	61	1	0	1	476	520
Conservation Reserve Program	0	0	0	0	2	1,671	1,693	1,435	1,551	1,657
Other conservation programs	0	0	0	0	0	85	156	247	331	302
Noninsured Assistance (NAP)	0	0	0	0	2	52	23	54	75	177
Total direct payments	5,847	9,143	5,057	4,134	5,807	7,017	8,431	13,861	25,877	12,827
1988-99 crop disaster	960	872	2,461	577	14	2	-2	1,913	1,299	0
Emergency livestock/tree/DRAP livestock indemn/forage assist.	94	72	105	83	81	128	5	328	250	26
Purchases (net)	321	525	293	-51	-249	-60	207	668	784	57
Producer storage payments	14	9	12	23	0	0	0	0	0	0
Processing, storage, and transportation	185	136	112	72	51	33	38	62	75	75
Export donations ocean transportation	139	352	156	50	69	34	40	323	617	161
Operating expense <sup>1</sup>	6	6	6	6	6	6	5	4	60	5
Interest expenditure	532	129	-17	-1	140	-111	76	210	626	707
Export programs <sup>2</sup>	1,459	2,193	1,950	1,361	-422	125	212	165	329	691
Other	-403	545	-326	-105	100	-28	3	234	477	598
Total	9,738	16,047	10,336	6,030	4,646	7,256	10,143	19,223	32,341	16,395

1/ Does not include CCC Transfers to General Sales Manager. 2/ Includes Export Guarantee Program, Direct Export Credit Program, CCC Transfers to the General Sales Manager, Market Access (Promotion) Program, starting in FY 1991 and starting in FY 1992 the Export Guarantee Program - Credit Reform, Export Enhancement Program, Dairy Export Incentive Program, & Technical Assistance to Emerging Markets, and starting in FY 2000 Foreign Market Development Cooperative Program and Quality Samples Program. 3/ Approximately \$1.5 billion in benefits to farmers under the Disaster Assistance Act of 1989 were paid in generic certificates and were not recorded directly as disaster assistance outlays. 4/ Includes cash payments only. Excludes generic certificates in FY 86-96. E= Estimated in FY 2001 Mid-Session Review Budget which was released on June 26, 2000 based on April 2000 supply & demand estimates. The CCC outlays shown for 1996-2002 include the impact of the Federal Agriculture Improvement and Reform Act of 1996, which was enacted on April 4, 1996, and FY 2000 and FY 2001 outlays include the impact of the Agricultural Risk Protection Act of 2000, which was enacted on June 20, 2000. Minus (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds). Information contact: Richard Pazdalski Farm Service Agency-Budget at (202) 720-3675 or Richard\_Pazdalski@wdc.fsa.usda.gov.

## Food Expenditures

**Table 36—Food Expenditures**

	Annual			2000			Year-to-date cumulative		
	1997	1998	1999	Sep	Oct	Nov	Sep	Oct	Nov
	<i>\$ billion</i>								
Sales <sup>1</sup>									
At home <sup>2</sup>	383.8	392.3	407.3	35.8	34.5	35.7	319.4	353.9	389.6
Away from home <sup>3</sup>	309.5	322.1	343.7	31.3	31.6	29.6	280.6	312.2	341.8
	<i>1998 \$ billion</i>								
Sales <sup>1</sup>									
At home <sup>2</sup>	392.4	392.3	397.8	34.2	32.8	34.1	307.4	340.3	374.4
Away from home <sup>3</sup>	317.4	322.1	335.3	29.7	29.9	28.0	268.3	298.2	326.1
	<i>Percent change from year earlier (\$ billion)</i>								
Sales <sup>1</sup>									
At home <sup>2</sup>	3.8	2.2	3.8	6.0	-3.1	2.7	6.5	5.5	5.2
Away from home <sup>3</sup>	5.9	4.1	6.7	9.3	5.2	3.0	10.5	9.9	9.3
	<i>Percent change from year earlier (1998 \$ billion)</i>								
Sales <sup>1</sup>									
At home <sup>2</sup>	-0.2	0.0	1.4	3.1	-5.4	0.5	6.7	5.4	4.9
Away from home <sup>3</sup>	3.0	1.5	4.1	6.6	2.7	0.6	11.1	10.1	9.3

-- = Not available. 1. Food only (excludes alcoholic beverages). Not seasonally adjusted. 2. Excludes donations and home production. 3. Excludes donations, child nutrition subsidies, and meals furnished to employees, patients, and inmates. *Information contact: Annette Clauson (202) 694-5389*  
 Note: This table differs from Personal Consumption Expenditures (PCE), table 2, for several reasons: (1) this series includes only food, excluding alcoholic beverages and pet food which are included in PCE; (2) this series is not seasonally adjusted, whereas PCE is seasonally adjusted at annual rates; (3) this series reports sales only, but PCE includes food produced and consumed on farms and food furnished to employees; (4) this series includes all sales of meals and snacks, while PCE includes only purchases using personal funds, excluding business travel and entertainment. For a more complete discussion of the differences, see "Developing an Integrated Information System for the Food Sector," ERS Agr. Econ. Rpt. No. 575, Aug. 1987.

## Transportation

**Table 37—Rail Rates; Grain & Fruit-Vegetable Shipments**

	Annual			1999		2000				
	1997	1998	1999	Oct	May R	Jun R	Jul	Aug	Sep	Oct P
Rail freight rate index <sup>1</sup> (Dec. 1984=100)										
All products	112.1	113.4	113.0	113.3	114.1	114.4	115.3	115.0	114.7	115.2
Farm products	120.3	123.9	121.8	122.8	121.8	122.3	122.3	124.2	124.6	124.5
Grain food products	107.6	107.4	99.6	100.4	100.4	100.5	100.5	--	100.4	100.9
Grain shipments										
Rail carloadings (1,000 cars) <sup>2</sup>	23.2	22.8	24.4	28.3	21.9	20.7	22.1	23.4	24.0	24.6
Barge shipments (mil. ton) <sup>3</sup>	2.6	3.0	3.5	3.8	3.5	3.3	4.3	3.3	2.7	3.1
Fresh fruit and vegetable shipments <sup>4</sup>										
Piggy back (mil. cwt)	1.1	0.9	0.7	0.6	1.1	1.0	0.8	0.7	0.8	0.6
Rail (mil. cwt)	1.7	1.2	1.1	1.3	1.4	2.0	1.3	1.0	1.2	1.7
Truck (mil. cwt)	42.6	42.2	44.3	42.3	59.3	56.5	44.4	42.5	38.9	39.6

P= Preliminary. R = Revised. -- = Not available. 1. Department of Labor, Bureau of Labor Statistics. 2. Weekly average; from Association of American Railroads. 3. Shipments on Illinois and Mississippi waterways, U.S. Corps of Engineers. 4. Agricultural Marketing Service, USDA.

*Information contact: Jenny Gonzales (202) 694-5296*

## Indicators of Farm Productivity

**Table 38—Indexes of Farm Production, Input Use, & Productivity<sup>1</sup>**

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
	1992 = 100									
Farm output	88	83	89	94	94	100	94	107	101	106
All livestock products	92	93	94	95	98	100	100	108	110	109
Meat animals	95	97	97	96	99	100	100	102	103	100
Dairy products	94	96	95	98	98	100	99	114	115	115
Poultry and eggs	81	83	86	92	96	100	104	110	114	119
All crops	86	75	86	92	92	100	90	106	96	103
Feed crops	84	62	85	88	86	100	76	102	83	98
Food crops	84	76	83	107	82	100	96	97	90	93
Oil crops	88	72	88	87	94	100	85	115	99	107
Sugar	95	91	91	92	96	100	95	106	98	94
Cotton and cottonseed	92	96	75	96	109	100	100	122	110	117
Vegetables and melons	90	81	85	93	97	100	97	113	108	112
Fruit and nuts	95	102	98	97	96	100	107	111	102	102
Farm input <sup>1</sup>	101	100	100	101	102	100	101	102	101	100
Farm labor	101	103	104	102	106	100	96	96	92	100
Farm real estate	100	100	102	101	100	100	98	99	98	99
Durable equipment	120	113	108	105	103	100	97	94	92	89
Energy	102	102	101	100	101	100	100	103	109	104
Fertilizer	106	97	94	97	98	100	111	109	85	89
Pesticides	92	79	93	90	100	100	97	103	94	106
Feed, seed, and purchased livestock	97	96	91	99	99	100	101	102	109	95
Inventories	102	98	93	97	100	100	104	99	108	104
Farm output per unit of input	87	83	90	93	92	100	94	105	100	106
Output per unit of labor										
Farm <sup>2</sup>	87	81	86	92	89	100	98	111	110	106
Nonfarm <sup>3</sup>	95	95	96	96	97	100	100	101	--	--

-- = Not available. Values for latest year preliminary. 1. Includes miscellaneous items not shown separately. 2. Source: Economic Research Service.

3. Source: Bureau of Labor Statistics. *Information contact: John Jones (202) 694-5614*

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## Food Supply & Use

### Table 39—Per Capita Consumption of Major Food Commodities<sup>1</sup>

Commodity	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
	<i>Lbs.</i>									
Red meats <sup>2,3,4</sup>	115.6	112.3	111.9	114.0	112.1	114.7	115.1	112.8	111.0	115.6
Beef	65.4	63.9	63.1	62.8	61.5	63.6	64.4	65.0	63.8	64.9
Veal	1.0	0.9	0.8	0.8	0.8	0.8	0.8	1.0	0.9	0.7
Lamb & mutton	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.8	0.8	0.9
Pork	48.4	46.4	46.9	49.5	48.9	49.5	49.0	45.9	45.5	49.2
Poultry <sup>2,3,4</sup>	53.9	56.3	58.3	60.8	62.5	63.3	62.9	64.1	64.2	65.0
Chicken	40.9	42.4	44.2	46.7	48.5	49.3	48.8	49.5	50.3	50.8
Turkey	13.1	13.8	14.1	14.1	14.0	14.1	14.1	14.6	13.9	14.2
Fish and shellfish <sup>3</sup>	15.6	15.0	14.8	14.7	14.9	15.1	14.9	14.7	14.5	14.8
Eggs <sup>4</sup>	30.5	30.2	30.1	30.3	30.4	30.6	30.2	30.4	30.7	31.8
Dairy products										
Cheese (excluding cottage) <sup>2,5</sup>	23.8	24.6	25.0	26.0	26.2	26.8	27.3	27.7	28.0	28.4
American	11.0	11.1	11.1	11.3	11.4	11.5	11.8	12.0	12.0	12.2
Italian	8.5	9.0	9.4	10.0	9.8	10.3	10.4	10.8	11.0	11.3
Other cheeses <sup>6</sup>	4.3	4.5	4.6	4.7	5.0	5.0	5.0	5.0	5.0	4.8
Cottage cheese	3.6	3.4	3.3	3.1	2.9	2.8	2.7	2.6	2.7	2.7
Beverage milks <sup>2</sup>	224.2	221.8	221.1	218.3	213.4	213.6	209.8	210.0	206.9	204.5
Fluid whole milk <sup>7</sup>	97.5	90.4	87.3	84.0	80.1	78.8	75.3	74.6	72.7	71.6
Fluid lower fat milk <sup>8</sup>	106.5	108.5	109.9	109.3	106.6	106.0	102.6	101.7	99.9	98.5
Fluid skim milk	20.2	22.9	23.9	25.0	26.7	28.8	31.9	33.7	34.3	34.4
Fluid cream products <sup>9</sup>	7.8	7.6	7.7	8.0	8.0	8.1	8.4	8.7	9.0	9.2
Yogurt (excluding frozen)	4.2	4.0	4.2	4.2	4.3	4.7	5.1	4.8	5.2	5.1
Ice cream	16.1	15.8	16.3	16.3	16.1	16.1	15.7	15.9	16.4	16.6
Lowfat ice cream <sup>10</sup>	8.4	7.7	7.4	7.1	6.9	7.6	7.5	7.6	7.9	8.3
Frozen yogurt	2.0	2.8	3.5	3.1	3.5	3.5	3.5	2.6	2.1	1.9
All dairy products, milk equivalent, milkfat basis <sup>11</sup>	563.8	568.4	565.6	565.9	574.1	586.0	583.9	574.7	577.7	582.3
Fats and oils--total fat content	60.5	63.0	64.8	66.8	69.7	68.0	66.4	65.3	64.9	65.3
Butter and margarine (product weight)	14.6	15.3	15.0	15.4	15.8	14.8	13.7	13.5	12.8	12.5
Shortening	21.5	22.2	22.4	22.4	25.1	24.1	22.5	22.3	20.9	20.9
Lard and edible tallow (direct use)	1.8	2.2	1.8	3.5	3.4	4.2	4.4	4.8	4.1	5.2
Salad and cooking oils	24.4	25.3	26.4	27.2	26.9	26.2	26.9	26.2	28.6	27.9
Fruits and vegetables <sup>12</sup>	656.0	656.1	650.3	677.7	691.3	705.8	694.3	710.9	717.9	699.6
Fruit	278.0	272.6	255.3	283.8	283.1	291.0	284.8	290.2	296.8	281.4
Fresh fruits	122.9	116.3	113.0	123.5	124.5	126.3	124.1	128.1	131.9	131.8
Canned fruit	21.2	21.0	19.8	22.9	20.7	21.0	17.5	18.8	20.4	17.3
Dried fruit	13.2	12.1	12.3	10.8	12.6	12.8	12.8	11.3	10.8	12.8
Frozen fruit	4.1	3.8	3.8	3.9	3.7	3.8	4.2	4.0	3.7	4.2
Selected fruit juices	116.4	119.0	106.0	122.1	121.2	126.7	125.8	127.7	129.3	115.0
Vegetables	378.0	383.5	395.0	393.9	408.3	414.7	409.5	420.7	421.1	418.1
Fresh	172.2	167.1	167.4	171.1	178.2	184.6	179.1	184.1	190.4	186.5
Canning	102.4	111.6	114.4	112.2	112.9	112.4	110.8	109.5	107.8	108.0
Freezing	67.4	66.8	72.6	70.9	76.0	78.4	79.9	84.7	81.9	82.3
Dehydrated and chips	29.8	31.0	32.8	31.5	33.6	31.0	31.3	34.5	32.7	32.9
Pulses	6.3	7.1	7.8	8.1	7.7	8.4	8.4	8.0	8.3	8.4
Peanuts (shelled)	7.0	6.0	6.5	6.2	6.1	5.8	5.7	5.7	5.9	5.9
Tree nuts (shelled)	2.2	2.4	2.2	2.2	2.4	2.3	1.9	2.0	2.1	2.3
Flour and cereal products <sup>13</sup>	174.2	181.6	183.0	185.6	189.7	192.4	190.3	196.3	197.6	195.0
Wheat flour	129.7	136.0	137.0	138.9	143.3	144.5	141.8	148.7	149.5	145.9
Rice (milled basis)	14.8	15.8	16.2	16.7	16.7	18.1	18.9	17.8	18.4	18.9
Caloric sweeteners <sup>14</sup>	133.1	136.9	137.9	141.2	144.4	147.3	149.8	150.7	154.0	155.1
Coffee (green bean equiv.)	10.1	10.3	10.3	10.0	9.1	8.2	8.0	8.9	9.3	9.5
Cocoa (chocolate liquor equiv.)	4.0	4.3	4.6	4.6	4.3	3.9	3.6	4.2	4.1	4.4

-- = Not available. 1. In pounds, retail weight unless otherwise stated. Consumption normally represents total supply minus exports, nonfood use, and ending stocks. Calendar-year data, except fresh citrus fruits, peanuts, tree nuts, and rice, which are on crop-year basis. 2. Totals may not add due to rounding. 3. Boneless, trimmed weight. Chicken series revised to exclude amount of ready-to-cook chicken going to pet food as well as some water leakage that occurs when chicken is cut up before packaging. 4. Excludes shipments to the U.S. territories. 5. Whole and part-skim milk cheese. Natural equivalent of cheese and cheese products. 6. Includes Swiss, Brick, Muenster, cream, Neufchatel, Blue, Gorgonzola, Edam, and Gouda. 7. Plain and flavored. 8. Plain and flavored, and buttermilk. 9. Heavy cream, light cream, half and half, eggnog, sour cream, and dip. 10. Formerly known as ice milk. 11. Includes condensed and evaporated milk and dry milk products. 12. Farm weight. 13. Includes rye, corn, oats, and barley products. Excludes quantities used in alcoholic beverages, corn sweeteners, and fuel. 14. Dry weight equivalent.

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## Article Index 1996-2000

### Article Index 1996-2000

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In addition to standard-length articles and reports, most issues of *Agricultural Outlook* contain brief reports on a selection of the following commodities as well as on various agricultural issues.

- *Livestock: cattle, hogs, broilers, eggs, turkeys, dairy, aquaculture*
- *Crops: wheat, rice, feed grains, oilseeds, cotton, tobacco, sugar, vegetables, fruit, industrial crops*

These brief reports are included in the "Agricultural Economy," "Commodity Overview," or "Briefs" section. For earlier 5-year indexes, see previous January-February issues of *Agricultural Outlook* on the ERS website at [www.ers.usda.gov](http://www.ers.usda.gov).

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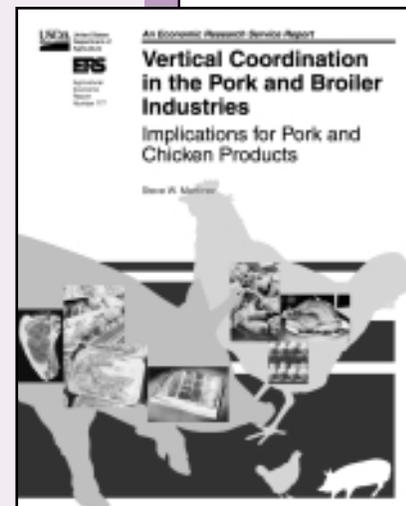
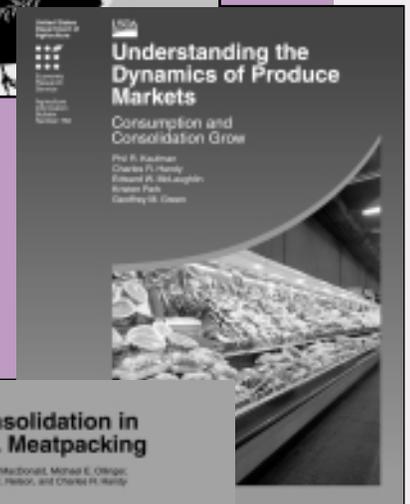
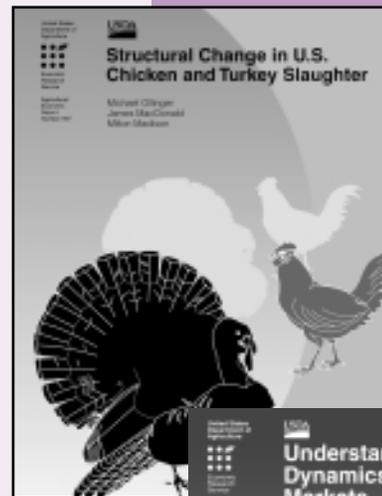
**Current Issues in Economics of Food Markets—Price and Quality of Pork and Broiler Products: What's the Role of Vertical Coordination?** Agriculture Information Bulletin No. 747-02, February 2000.

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# Agricultural Outlook Forum 2001

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**February 22 and 23, 2001  
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## ***What Issues Will Affect the Food and Agriculture Sector in 2001?***

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